Historical Collection

Columbia University
in the City of New York

College of Physicians and Surgeons

Library

Rebound APR 27 1946 DLG

Digitized by the Internet Archive
in 2014

https://archive.org/details/newyorkjournalo1184forr_0

THE NEW-YORK
JOURNAL OF MEDICINE,
AND THE
COLLATERAL SCIENCES.

Verumque est, ad ipsam curandi rationem nihil plus conferre, quam experientiam. CELSUS.

VOL. I.—NEW SERIES.

NEW-YORK:
HENRY G. LANGLEY, 3 ASTOR-HOUSE, BARCLAY ST.
1848.

WM. OSBORN, PRINTER, COR. SPRUCE & NASSAU-STS.

CONTENTS.—No. I.

(NEW SERIES.)

PART I.—ORIGINAL COMMUNICATIONS.

Page

Art. I.—On the Pathology of Congenital Dislocation of the Head of the Femur on the Dorsum of the Ilium.—(With plates.) By John Murray Cornochan, M. D., etc. 9

Art. II.—Case of Popliteal Aneurism Cured by Compression with a new Instrument.—(With a plate.) By A. E. Hosack, M. D., P. - - - - - 18

Art. III.—An Account of a severe Form of Epidemic Miliary Fever, which appeared at Fort Snelling, Upper Mississippi, in the Winter of 1847–8. By George F. Turner, M. D., Surgeon, U. S. Army, - - - - 21

Art. IV.—Cases of Pneumonia Typhoides; with Remarks on the use of Acetate Plumbi, in this Affection. By Moses C. Hasbrouck, M. D., of Rockland Co., N. Y. - - 24

Art. V.—Remarks on the Pathology of Epidemic Erysipelas. By H. N. Bennett, M. D., of Bethel, Conn. - - 28

Art. VI.—An Essay on the Nature and Curability of Heterologous Tumors. By N. S. Davis, M. D. - - 30

Art. VII.—A Case of Strangulated Inguinal Hernia, attended with Sloughing of the Intestine—Cure. By Alexander Ewing, M. D., of Dexter, Michigan, - - - 36

PART II.—CRITICAL ANALYSIS.

Art. VIII.—Practical Observations on certain Diseases of the Chest, and on the Principles of Auscultation. By Peyton Blakiston, M. D., F. R. S.; Fellow of the Royal College of Physicians, &c., &c. pp. 384. Phila. Lea & Blanchard. 1848. - - - - - - 40

Art. IX.—On the Causes and Treatment of Abortion and Sterility; being the Results of an Extended Inquiry into the Physiological and Morbid Condition of the Uterus, with Reference especially to Leucorrhœal Affections and the Diseases of Menstruation. By James Whitehead, F. R. C. S., Surgeon to the Manchester and Salford Lying-in Hospital. 8vo. pp. 368. Phila.: Lea & Blanchard. 1848. - 45

Art. X.—The Principles and Practice of Midwifery. By Da-

Page

VID H. TUCKER, M. D., Professor of the Principles and Practice of Medicine, &c. Philadelphia: 1848. Lindsay & Blakiston. Royal 12mo. pp. 405. - - - 70

ART. XI.—Elements of General Pathology; a Practical Treatise on the Causes, Forms, Symptoms and Results of Diseases. By ALFRED STILLE, M. D., Lecturer on Pathology and the Practice of Medicine; Member of Med. Soc. of Observation, Paris; Fellow of the Philadelphia College of Physicians, &c. Philadelphia: Lindsay & Blakiston. 1848. pp. 483. - - - - - 78

ART. XII.—On Bandaging, and other Operations of Minor Surgery. By F. W. SARGENT, M. D. Philadelphia. 1848. 12mo. pp. 379. - - - - - 86

BIBLIOGRAPHICAL NOTICES.

ART. XIII.—A Dictionary of Practical Medicine; comprising General Pathology, the Nature and Treatment of Diseases, Morbid Structures, &c. By JAMES COPLAND, M. D., F. R. S. Edited with Additions. By CHARLES A. LEE, M. D. Parts XVIII. and XIX. New-York: Harper & Brothers. 1848. - - - - - - 87

ART. XIV.—A Dispensatory and Therapuetical Remembrancer; comprising the entire lists of Materia Medica, Preparations and Compounds, with a full and distinct Version of every practical Formula, as authorized by the London, Edinburgh and Dublin Royal College of Physicians, in the latest editions of their several Pharmacopœias; to which are subjoined copious relative tables, exemplifying approved forms under which compatible medicines, &c., may be extemporaneously combined, &c., &c., &c. By JOHN MAYNE, M. D., L. R. C. S., Edinburgh. Revised: with the addition of the Formula of the United States Pharmacopœia, &c. By R. EGGLESFIELD GRIFFITH, M. D., author of "Medical Botany," &c. 12mo. pp. 329. Phila.: Lea & Blanchard. 1848. 88

ART. XV.—Botany of the United States, North of Virginia; comprising Descriptions of the Flowering and Fern-like Plants hitherto found in those States, arranged according to the Natural System. With a Synopsis of the Genera, according to the Linnæan System; a Sketch of the Rudiments of Botany, and a Glossary of Terms. By LEWIS C. BECK, M. D., Professor of Chemistry and Natural History in Rutgers College, New Jersey, &c., &c. Second edition. Revised and Enlarged. 12mo., large. pp. 480. New-York: Harper & Brothers. 1848. - - - ib.

ART. XVI.—Loiterings in Europe, or Sketches of Travel in France, Belgium, Switzerland, Italy, Austria, Prussia, Great

Page
Britain and Ireland. With an Appendix, containing Observations on European Charities and Medical Institutions. By JOHN W. CORSON, M. D. 12mo. pp. 497. New-York: Harper & Brothers. 1848. - - - - 89

PART III.—EDITORIAL AND AMERICAN MEDICAL RETROSPECT.

A Card. - - - - - - - 90
Croup, or Laryngitis Membranacea, treated by the Use of Argenti Nitras. - - - - - - - 91
Adulteration of Medicines, and the late Act of Congress. - 92
Ancient Monuments of the Mississippi Valley. - - 94

PATHOLOGY AND PRACTICAL MEDICINE.

On the Endemic Gastro-Follicular Enteritis, or "Summer Complaint" of Children, as it prevails in the United States. By *Edward Hallowell*, M. D., Fellow of the College of Physicians of Philadelphia, Member of the Academy of Natural Sciences, &c. - - - - - 94
Suppuration after Tapping in Ascites. - - - 106
The Cause of Yellow Fever. - - - - ib.
Whooping Cough. - - - - - 107
Iodide of Potassium in Tertiary Syphilis. - - - ib.

SURGERY.

Vascular Tumor of the Neck—Removal. By the late *George McClellan*, M. D. - - - - - 109
Popliteal Aneurism Successfully Treated by Compression. 110
Failure to Ligate the Femoral Artery for False Aneurism—Death in about sixty hours afterwards. - - - 112
Cancer of the Penis—Death a few hours after amputation, from eating Orange peel. - - - - - 113
Amputation through Large Joints. - - - - ib.

MIDWIFERY AND DISEASES OF FEMALES.

Occlusion of the Vagina. - - - - - ib.
Vaginal Hysterotomy, - - - - - 114
Ventral Pregnancy. - - - - - 115

MATERIA MEDICA AND PHARMACY.

Adulterated Medicines.—Extract from Dr. Edwards' Report on Imported Adulterated Drugs, Medicines, &c., read before the House of Representatives, June 2d, 1848. - - ib.

MISCELLANEA.

Medical Services—Legal responsibility of discontinuing the same. 119
New-York Hospital. - - - - - ib.
Influence of Statistics on Quackery. - - - ib.
University of Louisiana—Medical Department. - - ib.
Reward of the Editor of a Medical Journal. - - 120
American Medical Association. - - - - ib.

PART IV.—FOREIGN MEDICAL RETROSPECT.

MEDICAL PATHOLOGY AND PRACTICAL MEDICINE.

Page
Epidemic Fever of Ireland. - - - - 126
Bright's Disease on the Kidney. - - - - 127
Open Foramen Ovale, and its connexion with Cyanosis, - 128
Rupture of the Chordæ Tendinæ of the Tricuspid Valve. 129
Cerebral Congestion in its relation with Hemorrhage and Softening of the Brain. - - - - 130
Jaundice of New-born Infants.—By M. Hervieux. - - ib.
On Certain Forms of Alkaline Urine.—By Dr. G. Owen Rees. 131
Diseased Condition of the Mitral Valve. - - - 132
" " " Aortic " - - - ib.
Pericarditis. - - - - - - ib.
Endocarditis. - - - - - - ib.
Perforating Ulcer of the Stomach. - - - - ib.
Dr. Hughes Bennett on the Treatment of Phthisis Pulmonalis by Cod-liver Oil. - - - - - - 133
The Cause of Œdema of the Lower Extremities. - - ib.

SURGERY.

Ununited Fractures, treated by Subcutaneous Puncture. - 134
Surgical Treatment of Solitary Neuromatous Tumors. - 135
Strangulated Congenital Hernia in an Infant.—Operation—Cure. 136
Gonorrhœal Ophthalmia. - - - - - ib.
Œdema of the Glottis. - - - - - 137
Guides for performing Partial Amputations of the Foot. - 138
Death from the Admission of Air into a Vein in passing a Seton in Front of the Neck. - - - - - - ib.
On Catheterism of the Œsophagus in Cases of Stricture. - 139
Traumatic Tetanus. - - - - - 140

MIDWIFERY.

Use of Chloroform in Midwifery. - - - - 140
Removal of Uterine Polypi. - - - - ib.
Observations on the Influence of the Death of the Fœtus in relation to its Retention in, and Expulsion from, the Uterus. 141
Intra-uterine Peritonitis in the Fœtus. - - - 142
Iterstitial Extra-Uterine Pregnancy. - - - ib.

MISCELLANEA.

Mortality of Irish Medical Practitioners. - - - 143
The Eclectic Practitioners, or the so-called Practical Men. ib.
On the Discovery of a new Fluid for preserving the Color of Pathological and Anatomical Preparations. - - 144
Gutta Percha for Artificial Palate. - - - - ib.

TO READERS AND CORRESPONDENTS.

Under the head of Editorial, as well as upon the title-page of this number, our readers will perceive that Charles A. Lee, M. D., has retired from the editorial charge of the Journal. We regret that "the pressure of other engagements" has necessitated the change. The reluctance of both editor and publisher to such a change, and the new arrangements which it became necessary to make, have contributed in part to the delay of the present issue. The editorial supervision of the New-York Journal of Medicine has been placed in charge of S. S. Purple, M. D., who has for the last year and a half assisted Dr. Lee in his editorial duties. The patrons of the Journal may feel assured that in all respects it will continue to be the exponent of liberal principles, as originally set forth in the prospectus issued under the direction of its first editor—the much lamented Samuel Forry, M. D., and afterwards clearly set forth in the first number of the fifth volume, when its editorial supervision was undertaken by Dr. Lee. The publisher feels grateful for the favorable support it has received from the medical profession in both the city and country, and commencing, as this number does, Vol. I. of a new series, he would call especial attention to the improved arrangement and typographical appearance of this number. He sincerely hopes that the New-York Journal of Medicine may continue to merit and receive the contributions and support of a liberal profession.

☞ All communications intended for publication, or relating in any way to the editorial management of the Journal, as well as Books for Review, should be sent, *free of expense*, directed to the Editor of the New-York Journal of Medicine, care of Henry G. Langley, 3 Astor House, Barclay-street, New-York. (See Publisher's Notice, on the succeeding page.)

No. 2, of Vol. I., New Series, is now in press, and will shortly be published.

Articles have been received from Drs. Batchelder, Le Conte, Shearman, Chesebrough, and Stimson. The following Books and Pamphlets have been received since our last :

Principles of Medicine ; comprising General Pathology and Therapeutics, and a brief general view of Etiology, Nosology, Semeiology, Diagnosis, Prognosis, and Hygienics. By Charles J. B. Williams, M. D., F. R. S., Fellow of the Royal College of Physicians ; Professor of the Principles and Practice of Medicine, and of Clinical Medicine, and first Physician to the Hospital University College, London ; Consulting Physician to the Hospital for Consumption and Diseases of the Chest; late President of the Pathological Society of London, &c. Edited, with additions, by Meredith Clymer, M. D., Fellow of the Philadelphia College of Physicians; late Professor of the Principles and Practice of Medicine, and of Clinical Medicine, in the Franklin Medical College; Consulting Physician to the Philadelphia Hospital, &c., &c. Third American, from the second and enlarged London edition. Philadelphia: Lea & Blanchard, 1848. 8vo., pp. 440. (From the Publishers.)

A Dictionary of Practical Medicine; comprising General Pathology, the Nature and Treatment of Diseases, Morbid Structures, &c., &c. By James Copland, M. D., F. R. S. Edited, with additions, by Charles A. Lee, M. D. Parts XVIII and XIX. New-York: Harper & Brothers, 1848. 8vo. pp. 144 each. (From the Publishers.)

Botany of the United States, North of Virginia; comprising Descriptions of the Flowering and Fern-like Plants, hitherto found in those States, arranged according to the Linnæan System, a Sketch of the Rudiments of Botany, and a Glossary of Terms. By Lewis C. Beck, M. D., Professor of Chemistry and Natural History in Rutgers Medical College, New-Jersey, &c., &c. Second edition, revised and enlarged. New-York: Harper & Brothers. Large 12mo. pp. 480. (From the Publishers.)

Loiterings in Europe; or Sketches of Travel in France, Belgium, Switzerland, Italy, Austria, Prussia, Great Britain and Ireland. With an Appendix containing Observations on European Charities and Medical Institutions. By John W. Corson, M. D. New-York: Harper & Brothers, 1848. 12mo. pp. 397. (From the Publishers.)

On Bandaging and other operations of Minor Surgery. By F. W. Sargent, M. D. Philadelphia: Lea & Blanchard, 1848. 12mo. pp. 379. (From the Publishers.)

Lectures on Yellow Fever, its Causes, Pathology and Treatment. By John Hastings, M. D., United States Army. Philadelphia: Lindsay & Blakiston, 1848. 8vo., pp. 69. (From the Publishers.)

A Modern Medical Companion; containing Plain Directions for the Employment of Medicines, their Properties and Doses, with a Description of Symptoms and Treatment of Diseases; with Directions for Counteracting the Effects of Poisons, Restoring Suspended Animation, Reduction of Dislocations and Fractures, with Rules and Instructions in Midwifery. Also a selection of the most Efficacious Prescriptions for Adult and Infantile Diseases. For the use of Clergymen, Sea Captains, Heads of Families, and all who may reside at a distance from professional assistance. Selected and Compiled by R. W. Warrington, M. D. New-York, 1848. 16mo., pp. 288. (From the Author.)

Proceedings of the Annual Convention of the Connecticut Medical Society, May, 1848, together with a List of Members and the Annual Address. Hartford, 1848. 8vo., pp. 48. (From the Society.)

Minutes of the Proceedings of the Medical Convention of South Carolina. Held in Charleston, in February, 1848. Charleston, 1848. 8vo., pp. 81. (From the Convention.)

By-Laws Adopted by the Managers of the New-Jersey State Lunatic Asylum at Trenton. Also, the Act to Provide for the Organization of said Asylum and for the Care and Maintenance of the Insane, passed March 23d, 1847, and the Supplement to said Act, passed March 9th, 1848. Trenton, 1848. 8vo., pp. 46. (From Dr. Buttolph.)

Twenty-ninth Annual Report and Documents of the New-York Institution for the Instruction of the Deaf and Dumb to the Legislature of the State of New-York, for the year 1847. New-York, 1848. 8vo., pp. 100. (From Dr. Monell.)

The Influence of Dress in the Production of Disease in Females. Read before the Chenango County Medical Society, June 10th, 1847. By Dr. William D. Purple, Permanent Member of the Medical Society of the State of New-York. Albany, Printed by Joel Munsell, 1848. 8vo., pp. 11. (From the Author.)

An Address delivered at the Castleton Medical College, Introductory to the Spring Session of 1848. By Joseph Perkins, M. D., Professor of Materia Medica and Obstetrics. Published by the Class. Troy, 1848. 8vo., pp. 16. (From the Author.)

Proceedings of the New-York Historical Society, January, 1848. New-York, 1848. 8vo., pp. 32. (From the Society.)

Proceedings of the Annual Convention of the Connecticut Medical Society, May, 1848, together with a List of its Members, and the Annual Address. Hartford, 1848. 8vo., pp. 48. (From Dr. Russell.)

Review of Mr. Solly's book on the Brain, with occasional glances at Position and Progress in Medical Science. By D. Dowler, M. D., of New-Orleans, 1848. 8vo., pp. 24. (From the Author.)

The following Journals have been received in Exchange:

The Charleston Medical Journal and Review, Edited by P. C. Gaillard, M. D. and H. W. De Saussure, M. D., for May. (Bi-Monthly, Charleston.)

The Medical Examiner and Record of Medical Science, Edited by Robert M. Huston, M. D., for May and June. (Monthly, Philadelphia.)

Southern Medical and Surgical Journal, Edited by Paul F. Eve, M. D., for May and June. (Monthly, Augusta.)

St. Louis Medical and Surgical Journal, Edited by M. L. Linton, M. D., and Wm. M. McPheters, M. D. (Monthly, St. Louis.)

The North-Western Medical and Surgical Journal, Edited by W. B. Herrick, M. D., and J. Evans, M. D., for April and May. (Bi-Monthly, Chicago and Indianapolis.)

Buffalo Medical Journal, and Monthly Review of Medical and Surgical Science, Edited by Austin Flint, M. D., for May and June. (Monthly, Buffalo.)

The Boston Medical and Surgical Journal, Edited by J. C. V. Smith, M. D., for May and June. (Weekly, Boston.)

The Annalist, a Record of Practical Medicine in the City of New-York, Edited by Wm. C. Roberts, M. D., for May and June. (Semi-Monthly, New-York.)

The Western Lancet and Hospital Reporter, Edited by L. Lawson, M. D., and John P. Harrison, M. D., for May and June. (Monthly, Cincinnati.)

The Western Journal of Medicine and Surgery, Edited by D. Drake, M. D., L. P. Yandell, M. D., and F. W. Colescott, M. D., for May and June. (Monthly, Louisville.)

The Missouri Medical and Surgical Journal, Edited by Thos. Barlow, M. D., and A. J. Coons, M. D., for May and June. (Monthly, St. Louis.)

The British-American Journal of Medical and Physical Science, Edited by Archibald Hall, M. D., L. R. C. S. E., for May and June. (Monthly, Montreal.)

The New-York Dental Recorder, Edited by C. C. Allen, M. D., Dentist, for May and June. (Monthly, New-York.)

The Dublin Quarterly Journal of Medical Science, Edited by ———, for May. (Quarterly, Dublin, Ireland.)

Monthly Journal and Retrospect of Medical Science, Edited by ———, for May and June. (Monthly, Edinburgh and London.)

London Medical Gazette, or Journal of Practical Medicine, Edited by ———, for May and June. (Weekly, London.)

The British Record of Obstetric Medicine, Surgery and Diseases of Women and Children, &c., &c., to which is annexed a Library of rare Obstetric Medical and Surgical Monographs, &c., Edited by Charles Clay, M. D. (Not yet received.)

☞ Communications intended for publication, and Books for Review, should be sent *free of expense*, directed to the Editor of the New-York Journal of Medicine, care of Henry G. Langley, 3 Astor House, Barclay street, New-York. Persons at a distance may direct parcels *paid* as above, under cover, to Lindsay & Blakiston, Philadelphia; or Wm. D. Ticknor & Co., Boston; or John Wiley, Paternoster Row, London. The attention of correspondents is respectfully requested to the above, as the publisher is frequently subjected to unnecessary expense for postage and carriage.

All remittances of money and letters on the *business* of the Journal, should be addressed to the publisher, Henry G. Langley, New-York.

The advertising sheet belongs to the business department of the Journal, and all communications for it should be addressed to the publisher, under whose exclusive control it is.

Dr CARNOCHAN'S CASE OF DOUBLE CONGENITAL DISLOCATION

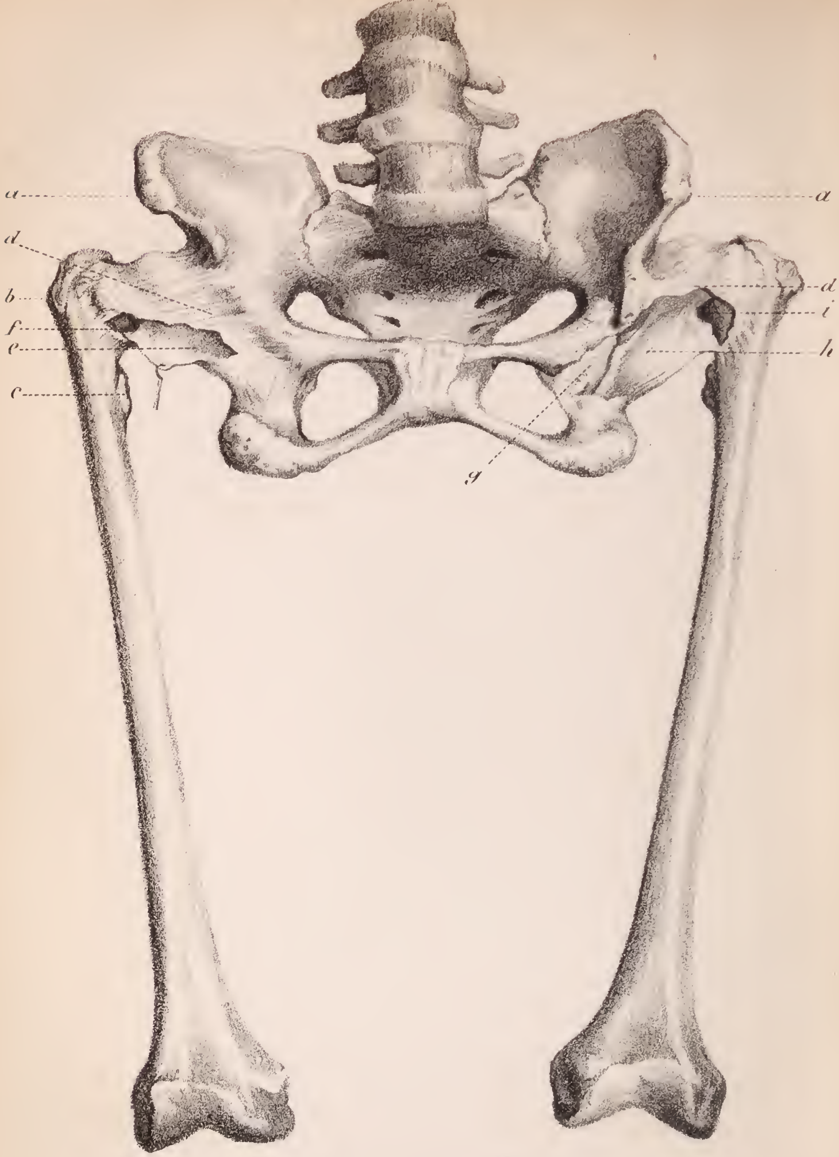


Fig 1st Front View of the Pelvis.

a. Anterior and Superior Spinous process of the Ilium.
b. Trochanter Major.
c. Trochanter Minor.
d. Anterior part of the Original Capsular Ligament.
e. The Original Capsule laid open.
f. The Annular opening by which the Head of the Femur escaped upon the Dorsum
g. The Original Acetabulum; become now Triangular.
h. The Cavity of the Original Capsule laid open by removal of its Anterior Wall.
i The Neck of the femur grasped by the Annular Opening in the Capsule through which the Head passe

LITH BY SARONY & MAJOR FOR THE NEW YORK JOURNAL OF MEDICINE.

OF THE HEADS OF BOTH FEMURS UPON THE DORSA OF THE ILIA.

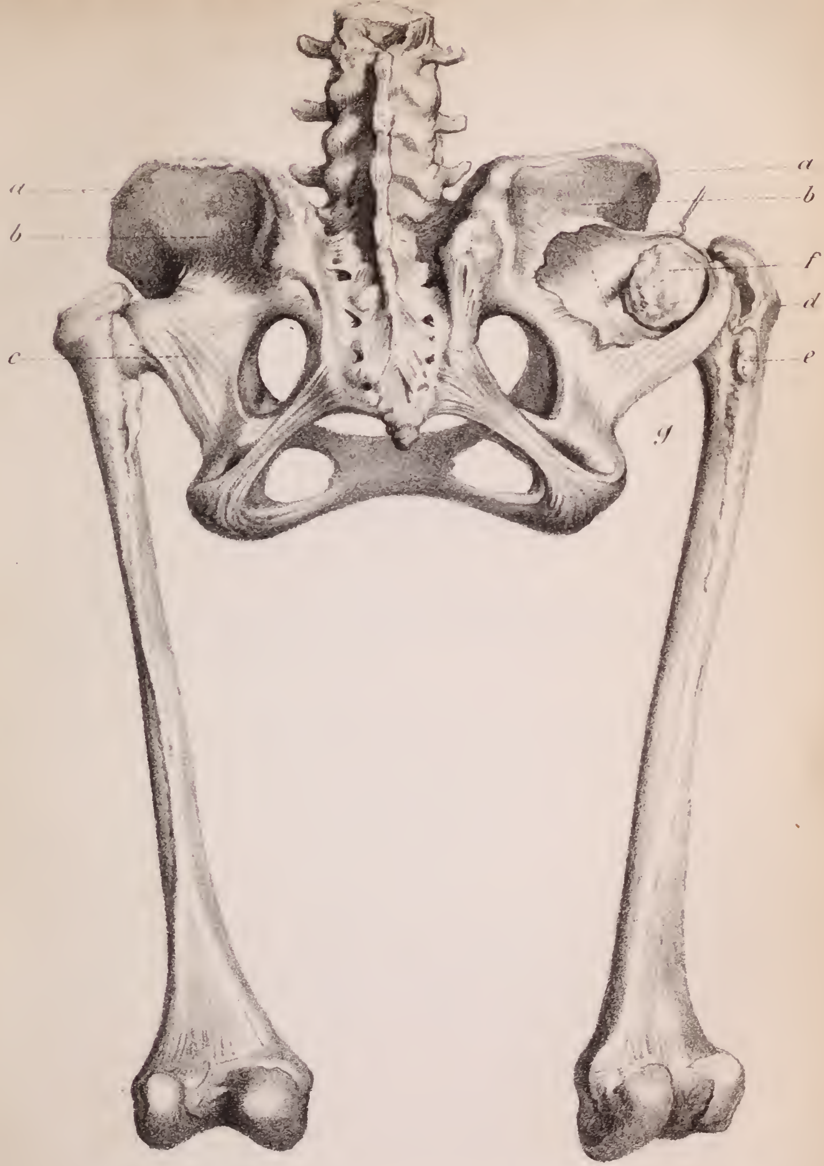


Fig II^nd. Posterior View of the Pelvis.

a. The Crest of the Ilium.
b. The Dorsum Ilii.
c. Posterior Surface of the New Capsule entire.
d. Trochanter Major.
e. Trochanter Minor.
f. Head of the Femur lying in the New Capsule.
g. New Capsule laid open shewing its Interior.

LITH. BY SARONY & MAJOR FOR THE NEW YORK JOURNAL OF MEDICINE.

THE NEW-YORK

JOURNAL OF MEDICINE.

FOR JULY, 1848.

PART FIRST.

Original Communications.

ART. I.—*On the Pathology of Congenital Dislocation of the Head of the Femur on the Dorsum of the Ilium.*—(With plates.) By JOHN MURRAY CARNOCHAN, M. D., &c.

SOME time ago, I wrote an article which was inserted in the London Lancet of 21st September, 1844, containing remarks on the congenital luxations of the head of the femur, upon the dorsum of the ilium, together with some physiological comments on this interesting affection, and illustrated it with plates, taken from a living subject, delineating the peculiarities of this morbid condition, as observed during life. At the time that article was published, I had had no opportunity of dissecting any case of this nature, but having spent the following winter in studies at the dissecting rooms of the Ecole Pratique at Paris, I had the good fortune to meet with three cases, amongst the bodies brought into that institution for anatomical purposes. One of the subjects alluded to presented all the pathognomonic characters externally, appertaining to my case recorded in the Lancet of double luxation of the heads of both femurs upon the dorsum of the ilium. I select it, therefore, from the others; and at present shall relate the appearances I found in making the dissection of the various tissues surrounding, and in connection with, the ilio-femoral articulations, giving it as a pure and uncomplicated specimen of double congenital luxation of the ossa femorum, and looking upon it as signally elucidating the general pathological characters of this affection. To aid the description of the parts, I have had recourse to an admirably-executed drawing herewith annexed, of the pelvis, and the ligaments of the coxo-femoral articulation as seen immediately after the removal of the soft parts.

The subject from which the following description is taken, was a female, apparently between 60 and 70 years of age, and as observed while lying on the table, it is seen to be somewhat emaciated, but this is most evident as regards the inferior extremities. The soft parts about the basin are flabby; a considerable disproportion between the size of the trunk and the length of the inferior extremities is remarkable, owing to the ascent of the heads of the femurs, upon the dorsa of the iliac bones. The head, thorax, and abdomen, present nothing abnormal while the body is in a recumbent position, but being placed in the erect attitude, the superior extremities appear too long for the trunk; the trunk itself appearing as it were wedged and sunk between the upper portion of the femurs. The thorax and abdomen, are thrown forward with a salient anterior curve, while the region of the loins, and the lower part of the dorsal vertebræ, present a curvature with a corresponding concavity. In this latter position, also, the anterior superior spinous processes of the ilia, are thrown forwards, while the lower part of the sacrum and coccyx take a direction upwards and backwards; the base of the sacrum being consequently tilted forwards and downwards. The cristæ of the iliac bones are almost vertical, and the trochanters can be felt standing out at a right angle to the external surface of the dorsum, nearly on a level with the posterior portion of the crests, and forming the apex of a conoid eminence, the base of which is at the ilium itself. The heads of both femurs enjoy free motion upon the dorsa of the iliac bones, and, while the trochanters can be pushed upwards and outwards, so as to be within half an inch of the crests of the ilia, when traction in the opposite direction is exerted, they are felt to descend through a space of nearly two inches, and become nearly on a level with a direct line drawn from the depressed anterior and superior spinous processes. The pelvis itself, with the exception of the unusual inclination of its axes, and the unnatural projection caused posteriorly by the abnormal position of the trochanters, appears to be, in other respects, tolerably well formed; the transverse diameter being, however, somewhat increased at the expense of the antero-posterior, but neither as regards the pelvis, nor the other osseous parts of the extremities or trunk, are there to be seen any evidences of a rachitic disposition. Between the anterior and spinous processes, there is a distance of eight inches; between the anterior superior spinous process and the tuberosity of the pubes, four inches and a half; while between the tuberosities of the ischia there is a space of five inches and three quarters, showing a considerably exaggerated diameter in this direction. The nearly equilateral triangle observed in the natural position of the parts, between the top of the trochanter, the tuberosity of the pubes, and the anterior superior spinous process of the ilium, is altogether changed, the measurements between these several points differing materially according as the head of the femur is pushed upwards, or drawn downwards upon the dorsum of the ilium. The play of motion which the head of the femur, must have had in the act of progression during life, may be said to have been about two inches, as that extent of change of position of the head of the bone can be obtained, by an alternating force applied to its shaft, of traction downwards, or propulsion upwards. In the attempt to rotate, or move in different directions, the inferior extremity, a sensation of crepitus is felt, analogous to that produced by effusion or thickening of the ligamentous structure about an articulation, and the various motions can be effected with less facility than is generally observed in a healthy joint. Adduction and the action of flexing the thigh upon the pelvis, is less impeded than the other motions, but abduction, and extension, are permitted to a very limited extent.

As far as can be seen externally, the dislocation on both sides is exactly similar in every particular, and the two sides of the pelvis, in regard to the relations they bear, with the displaced head and trochanter of the femur, offer no perceptible variety. It will be seen by reference to the case already published by me in the Lancet, that the pathognomonic characters described, as belonging to the patient there alluded to, are perfectly analogous to those which claim our consideration in the present instance.

The external appearances, then, being in both cases, the one a facsimile of the other, it may reasonably be supposed that the deeper tissues, are also analogous. After these preliminary remarks, as regards the external characters or signs presented by the double congenital luxation of the head of the femur upon the dorsum ilii, we shall now describe the appearances met with upon dissection; first of the soft parts, and then in connection with the articular surfaces appertaining to the skeleton.

The skin occupying the region of the haunch is soft and flaccid, but in other respects presents nothing remarkable. The subcutaneous adipose cellular layer is dense and interspersed with pelotons of adipose tissue, which also are more condensed than usual. The aponeurosis covering the glutei is natural, but in attempting to remove this from the glutæus maximus, the fibres of this muscle are found to be so friable, that it is impossible to remove the investing fascia, without carrying along with it some of the degenerated muscular tissue. The first layer of muscles being exposed, consisting of the glutæus maximus, the anterior portion of the glutæus medius, and the upper portion of the semi-membranosus, semi-tendinosus and biceps, the general character of the muscular tissue is found to be much changed. These muscles are soft, flabby and pale, and have undergone, in many points, a partial conversion from the muscular into a kind of yellowish, fatty tissue. This is particularly to be observed with regard to the glutæus maximus and the anterior portion of the glutæus medius, but the other muscles participate more or less in the degeneration. The muscular fibres in regard to their length seem to have accommodated themselves to their altered position, and are found to be shorter than they ought to be, when the normal relation of the parts exists, and this can easily be understood when it is considered that the points of origin, and insertion are considerably approximated by the ascent of the head of the femur. The glutæus maximus being divided transversely through its middle, and the two portions reflected, an unusual quantity of adipo-cellular tissue is met with; enveloping the large nerves, arteries, and veins situated beneath this muscle. By removing this loose tissue the deep-seated muscles are exposed, and are found to have undergone the same fatty degeneration as the more superficial layer, and the change or alteration in the direction of their fibres is particularly evident. Thus the quadratus femoris, obturator externus, gemelli and obturator internus, instead of passing transversely outwards as they generally do, assume a direction almost directly upwards, and but slightly outwards, to arrive at their point of insertion, at the root of the great trochanter. The pyriformis, which in the healthy subject is inclined downwards from its origin, has taken an inverse direction, and ascends upwards and outwards to reach its place of insertion at the digital fossa. In regarding the parts from above downwards, the glutæus medius, pyriformis and obturator internus, instead of resting upon the posterior portion of the cotyloid cavity, lie upon the partially-destroyed head of the femur and the posterior surface of the coxo-femoral ligament. The glutæus medius, the anterior fibres of which have become transverse, is pushed upwards towards the iliac crest, while the glutæus minimus is also shortened, and more fibrous than natural, particularly towards its insertion, where it becomes confounded with the capsular ligament.

Upon removing the tegumentary tissues from the anterior and upper part of the thigh, the femoro-pelvic muscles in that region are found to be shorter than natural, by the amount of the distance that the head of the femur has passed up beyond the cotyloid cavity. The same fatty degeneration and paleness of muscular tissue before alluded to, is found to pervade, more or less, the rectus, tensor vaginæ, femoris, and the belly of the iliacus internus. The sartorius and adductors present a more normal appearance of tissue, as does also the gracilis, which last is even somewhat hypertrophied. The psoas magnus taking its usual origin from the bodies and transverse processes of the last dorsal, and lumbar vertebræ, passes downwards and becomes tendinous about its middle. Where it passes over the brim of the pelvis and becomes mixed with the iliacus internus, a strong cord-like tendon results from the junction of these two muscles, which instead of passing downwards and outwards, to the usual point of insertion, hooks, as it were, over the margin of the pelvis, below the anterior inferior spinous process of the ilium, where it forms a deep groove ; it then takes a course upwards, outwards and slightly backwards, to the extent of nearly three inches to gain the trochanter minor. It is important to bear in mind the reflected course of the tendon of the psoas magnus, as it accounts anatomically for the curvature forwards of the lumbar region, and also operates in conjunction with the shortened state of the adductors in materially impeding the abduction of the limb. From the continued friction to which the parts must have been subjected during life in the act of locomotion, a large bursa, extending in various directions, exists beneath the conjoined tendons of the psoas and iliacus, and the finger, when inserted into it, meets with an extensive cavity, which in the natural state would have been occupied by the margin of the acetabulum and a portion of the head and neck of the femur, covered with the anterior part of the capsular ligament.

The arteries are much smaller than natural, and present a remarkably-tortuous disposition, not unlike the flexuosities of the vessels of the impregnated uterus. Thus, the main arterial trunk of the pelvis and inferior extremity, from the bifurcation of the aorta into the primitive iliacs to the place where the femoral artery perforates the tendinous sheath of the adductor magnus, presents a series of sinuosities bending in various directions; and this disposition is observed in the smaller branches, as well as in those also which spring from the internal iliacs to supply the parts on the glutæal region.

The veins corresponding to the arteries, if any difference exist, are larger than usual, and differ from the arteries in following a direct course, without presenting any irregular flexuosities.

The nervous centres in their structure present nothing abnormal in their individual parts, but they are considerably under the average size. The remains of a small bloody effusion (foyer sanguine) exists in the substance of the corpus striatum of the left side, and also another in the cerebellum near the corpus dentatum. The spinal marrow, except the diminution in volume just alluded to, appears generally natural, and the nerves forming the cauda equina, as also the sacral plexus, and the branches which take their origin from them, viz., obturatrix, gluteals, less and greater sciatics, &c., are below the normal size.

The ligamentous structure of the coxo-femoral articulation presents peculiarities and changes more remarkable than the other tissues already spoken of, and merits special attention as regards the possibility of effecting the reduction of this dislocation after a certain age, and the probability of maintaining the displaced articular surfaces in contact, should the attempt to reduce the dislocation be successful. The form and dimension of the capsular ligament have undergone a complete change, and in fact the disposition of the ancient capsule, and the parts it originally contained, have assumed altogether a new character, and abnormal relations with each other. The former ligamentous tissue itself has in some parts been replaced by a fatty structure, and has become thickened, or more attenuated in others.

It is not easy to describe by words the complex changes which the articular apparatus of the joint has undergone, but by a reference to the accompanying diagram, the description of the parts, as disclosed by dissection, will be better understood. Upon each side, the coxo-femoral articulation has become, as it were, furnished with two capsular ligaments, one which is the remains of the ancient capsule, and the other which is of more recent formation, and in which the head of the femur has been lodged since its escape from the original capsule. The old capsule, retaining its attachments at the margin of the acetabulum, has changed its usual direction, and is stretched upwards and outwards, in proportion as the head of the femur has mounted upon the dorsum ilii. The head of the bone becoming independent of the acetabulum, and placed during the erect posture of the subject at the upper portion of the interior of the natural capsule, would naturally ascend and descend, during the act of locomotion, and remain within the original capsule until, in the progress of time, further changes occur. Owing to the weight of the body being now thrown chiefly on the capsular ligament, and the consequent pressure of the head of the femur against its upper portion, particularly during progression, it is reasonable to suppose that this part more especially, of the capsular ligament, would be subjected to material changes. This apparently has been the case. The head of the femur acting from below upon the superior and inner portion of the old capsule, while the weight of the body afforded the counter-resistance from above, this portion of the capsule, thus situated between the internal part of the head of the os femoris and the dorsum of the ilium, being continually subjected during the actions of locomotion to the influences of powerful traction and pressure between two hard bodies, gives way, either by rupture, or more probably has become, as it were, worn through (usé), by a species of progressive absorption. The perforation of the capsule being now accomplished, and the weight of the body still continuing to be thrown upon the inferior extremities, the head of the os femoris pressing in one direction and the superincumbent weight of the body in another, escapes at length through this perforation, and new becomes situated upon the dorsum of the ilium, in contact, superiorly and externally, with the deep surface of the glutæus minimus, and inferiorly with the upper surface of the old capsule; an annular portion of which remains attached around, and thus encircles the cervix femoris.

As happens in traumatic dislocations, the formation of a new capsule has followed the escape of the head of the femur, from the confines of its original receptacle. This new capsule which entirely surrounds the head of the femur in its new position, is of a fibro-ligamentous character, mixed in some points with a considerable quantity of yellowish, dense, adipose structure. It is inelastic, but from the length of its fibres, allows a free motion of the bone in every direction after the muscles have been removed. Internally, it is attached to the margin of an oval depression situated on the dorsum of the ilium in front of the ischiatic notch; externally, it has formed adhesions with the annular perforation in the ancient capsule through which the head of the bone has passed. The external surface of the capsule is generally surrounded by a cellulo-adiposo tissue, but above, it is confounded with the fibrous structure of the deep surface of the gluteous minimus, and below, with the outer and superior part of the original capsule. The internal surface of the new capsular ligament is smooth and shining, studded in various points with numerous pediculated granular bodies of a yellowish adipose appearance, and at the lower and external portion, may be observed the perforation already mentioned, and which is seen to allow a free communication between the ancient capsule and that of more recent formation. Within the cavities of both capsules, a considerable quantity of synovial liquid is found, which most probably has been secreted from the lining membrane of the original capsule.

The ligamentum teres, most likely after being ruptured or worn through, on account of the stretching it must have undergone by the displacement of the parts, has entirely disappeared, leaving no trace of its existence behind it, either at its attachment to the head of the femur, or at the bottom of the cotyloid cavity.

The head of the femur has changed its character in regard to its size, shape and consistence. Its dimensions are much smaller than natural, being at least one-third below the natural standard. The aspect upon which the round ligament is generally attached, is flattened and seems either to have never been developed in this direction, or to have been absorbed, or as it were worn down by the friction to which it must have been subjected upon the dorsum of the ilium during progression. This flattened aspect presents superficially a thin lamina of bone, which is entirely denuded of articular cartilage, and on the surface of which are seen numerous irregular elevations and depressions perforated with small foramina, as if the subjacent cancellated tissue had been encroached upon. The osseous tissue of what remains of the head of the femur is entirely altered. Instead of the spherical form and resisting tissue of the adult normal bone, the head of the femur in the subject before us presents an unshapely, stunted appearance, covered externally by a thin, friable osseous shell, which lies upon a spongy, cellular tissue of bone, so soft as to be easily crushed between the fingers, and incapable of resisting the pressure of a common writing quill. The articular cartilage exists, but in a very limited extent, and is seen to end abruptly in a greyish undulating line, leaving that portion of the head in contact with the dorsum of the ilium, as has already been mentioned, entirely bare. The neck of the femur is shorter and more slender than natural, and forms a right angle with the shaft of the bone, which arrangement, however, may in part be accounted for by the advanced age of the patient. The ancient acetabula present changes no less remarkable than the corresponding heads of the femurs which have escaped from them. Instead of the round cup-like cavity, there is seen a triangular depression, not more than half an inch in depth, and two and three-quarter inches in perimeter. The upper and inferior borders of this triangle are nearly equal in length, but the inner is shorter and presents an excurvation which is probably the remains of the notch, on the margin of the acetabulum, for the passage of the articular vessels into the joint. This notch is crossed by a transverse ligament which completes the border of the cavity, but the cotyloid ligament whose use in the natural state of the parts, is to deepen the acetabulum, exists but in a rudimentary degree. To the margin of the acetabulum thus constituted, is attached the pelvic portion of the old capsular ligament. The capsular ligament in its passage across the cotyloid cavity to be attached to the cervix femoris becomes immediately connected with the cellulo-adipose tissue which fills up that depression, still by reason of its distinct fibrous structure it can be distinctly traced to its attachments at the margin of the acetabulum. The bottom of the acetabulum is entirely ossified, showing no signs of an arrêt de développement. There is no remains of the ligamentum teres, and what fills up the cavity may be said to have a resemblance to the fatty mass usually situated at the bottom of the acetabulum, and which has received the name of the glands of Havers.

There is no new cavity formed for the head of the femur in its new position, as might be supposed, but on the dorsum of the ilium, in front of the upper part of the sciatic notch, there exists an oval depression, of about an eighth of an inch in depth at its centre, and which is excavated at the expense of the ilium. The head of the bone has played on this surface during life, and has probably determined this species of depression. The circumference of this depression receives the attachment of the new capsular ligament, the fibres of which extend in a radiating manner inwards, and becoming confounded with the periosteum, have the appearance of lining its floor, except at the centre, where the friction of the two bones against each other must have been greatest; there the osseous tissue is entirely denuded, and at this point the ilium appears to be almost perforated. It will be seen that there has been no attempt at the formation of a new socket by ossific effusion from the surface of the ilia, as generally takes place in those instances of traumatic dislocation which have not been reduced. This is particularly worthy of remark, as M. Jules Guérin, of Paris, has stated that the deposition of new bony material, and an effort to form a new acetabulum, was an invariable result in those cases of congenital luxation where the original capsular ligament had been ruptured or torn, so as to allow the head of the femur to escape, and it is upon this supposition, entirely erroneous, as proved by the case now under consideration, that he has deduced the principles of treatment he recommends for these congenital affections of the hip-joint. In another place, I shall allude more fully to this point.

These are the principal alterations which are found to have taken place in the soft tissues, and at the ancient and recent articulations, but the changes of form and dimension which the bones of the pelvis, taken collectively, have undergone, merit also consideration, especially in a therapeutic point of view, and in relation to the passage of the head of the child during parturition. After the description which has been given of the muscles and of their abnormal direction, it is not difficult to suppose that the diseased retraction, as well as their physiological action, and the superincumbent weight of the body, acting conjointly, would modify, more or less, the natural shape of the bones under these influences during the early periods of infancy, while the osseous tissue was yet not completely consolidated. Dupuytren has said, that the direction of the bones of the pelvis was not changed in the congenital dislocation of the hip-joint, but a slight examination of the pelvis, deprived of the soft parts investing it, is sufficient to show the inaccuracy of this statement, and in analyzing farther the changes which the parts have undergone, most of the deviations in inclination, form and dimension, can in a great degree be referred to the abnormal direction in which the muscles have been obliged to act after the displacement of the head of the bone upon the dorsum of the ilium has taken place. By a glance at the accompanying diagram, it will be seen, that the pelvis generally is more slender in its construction, the osseous texture at the same time being less compact, owing probably to an original and continued diminution of nervous and vascular supply.

In comparing the denuded pelvis with that of the healthy female, the most prominent difference observed in a practical point of view is that between the upper and lower straits. In the pathological specimen we now treat of, the upper strait is found to be generally below the usual measurements both in the transverse and antero-posterior diameters, the latter, however, is proportionally much more contracted than the former. In a dried healthy female pelvis now before me, the transverse diameter is 5¼ inches, while in the morbid specimen it is 4⅞ inches; the antero-posterior diameter in the natural specimen is 3⅞ inches, in the other instance, it is only 2¾ inches.

The inferior strait in the morbid pelvis is still more anomalous. Between the apex of the coccyx, and the arch of the pubes, the measurement is 1⅞ inches, against 4 inches in the healthy pelvis; while the distance between the tuberosities of the ischia, making up, as it were, for the small antero-posterior diameter, is 5⅜ inches, the healthy pelvis in this direction being only 4¼ inches.

The wings of the ilia are smaller than natural, presenting angular prominences along the borders of the crests, and upon the dorsa are found the glenoid depressions already alluded to, where the heads of the femurs had played during life. Immediately below the anterior and inferior spinous process of the ilium on each side, the superficial groove in the healthy bone over which the conjoined tendons of the psoas magnus and iliacus internus passed, is converted into a semicircular deep depression or gutter, giving a more than usually projecting appearance to the anterior inferior spine of the ilium. The descending rami of the pubes, and the ascending rami of the ossa ischia seem spread laterally and pass almost transversely outwards, giving to the arch of the pubes more of a semi-circular appearance than of an obtuse angle, as is observed in the natural condition of this part of the osseous structure. The long diameter of the foramina obturatoria instead of running nearly parallel with the body runs almost in a transverse direction.

The sacrum is somewhat stunted, showing a greater curvature upon its anterior aspect than in the natural bone, and at its junction with the vertebral column, the sacro-vertebral angle is seen to be more prominent than usual. The spinal column in the lower part of the dorsal and lumbar regions, presents anteriorly a remarkable convexity corresponding to the concavity seen in the loins during life.

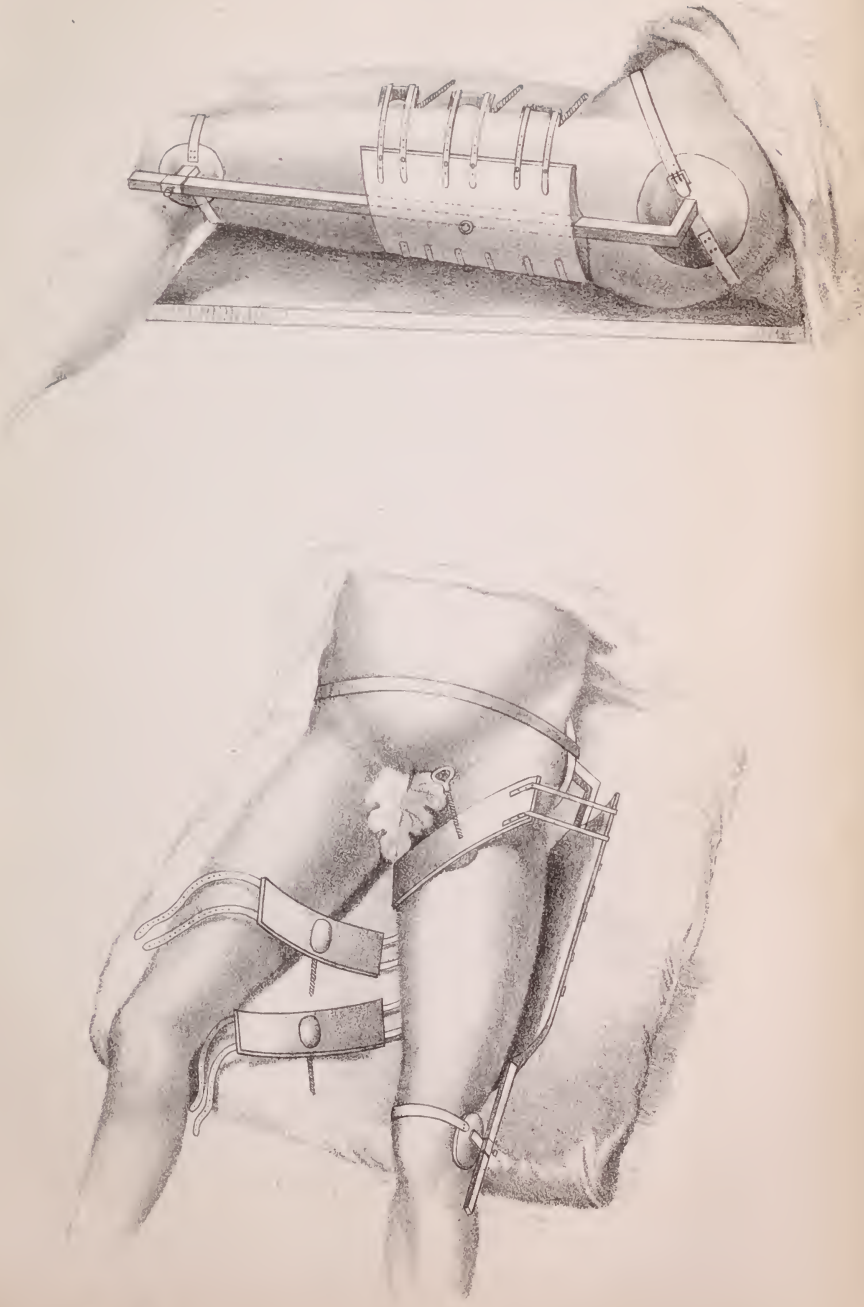
Although the superincumbent weight of the body, and the original diseased retraction of the muscles have contributed materially to the production of the changes just alluded to in the direction of the bones, it is evident that the pelvi-trochanteric muscles, whose course and manner of action have become entirely altered from the relative change of position of their points of origin and insertion, after the heads of the femurs have been dislocated, and ascended on the dorsa of the ilia, must, in the ordinary performance of their functions, have aided somewhat in bringing about those deviations in direction and inclination, which the component parts of the pelvis have now assumed, so different from what is to be seen in one naturally constructed. The head of the femur having slipped upon the dorsum of the ilium, it is easy to suppose that in progression, the lower dorsal and lumbar vertebræ would be pulled forwards by the action of the psoas magnus, while the deep gutter observed on the brim of the pelvis below the anterior inferior spine of the ilium, is no doubt caused by the conjoined tendons of the psoas magnus and iliacus internus playing like a pulley in this depression; these muscles being almost continually in a state of tension, owing to the increased distance of the small trochanter, since the ascent of the femur upon the ilium. The same muscles will also, in acting on both sides, flatten or depress the brim of the pelvis, and thus the antero-posterior diameter is reduced; and in connection with the relaxed state of the glutæus maximus and medius, the iliacus internus by its contractions will tend to render the wing of the ilium more vertical. The psoas magnus through the medium of its connection with the lumbar vertebræ, tilting forward the base of the sacrum, and the conjoined tendons in their passage to their insertion pushing downwards and backwards the brim of the pelvis, conduce to change the axes of the pelvis, and to render nearly vertical, in the erect posture, the crests of the ilia. The increased transverse diameter of the inferior strait and the almost horizontal direction of the rami of the pubes, and of the ischia where they form the arch, as well as the outward direction and increased separation of the tuberosities of the ischia, can be accounted for by the perverted action of the quadratus femoris, the gemelli, the obturatores, and perhaps, the upper fibres of the adductor magnus.

These pathological details, apparently somewhat minute, are necessary to be understood, in relation to the reducibility and general therapeutics of the congenital dislocations of the coxo-femoral articulation, to which, in connection with the varieties they present, I may revert at another time.

Art. II.—*Case of Popliteal Aneurism Cured by Compression with a new Instrument.* (With a plate.) By A. E. Hosack, M. D., P.

The following case of popliteal aneurism, cured by compression, will be found interesting to the surgical profession in several points of view.

First, From the aneurism having recurred after the femoral artery had been taken up.



Dr A. E. Hosacks, Instrument for the treatment of. Aneurism

LITH BY SARONY & MAJOR

Secondly, From the fact of its being the first instance in the United States wherein a cure has been effected by compression.

Thirdly, From the compression being accomplished by the means of a new instrument.

In March, 1846, and in the presence of my friends, Doctors Wilkes and Jones, and several students of medicine, I tied the femoral artery at the lower part of the upper third of the thigh, for a popliteal aneurism in a colored man, named Isaac Wilkins, between fifty and sixty years of age. The aneurism, which had attained to the size of a small goose-egg, had existed between four and five months. Upon securing the artery in the ligature, all pulsation in the tumor ceased ; the wound being dressed in the ordinary way, healed kindly in the usual time, casting off the ligature on the 26th day ; after which the swelling continuing gradually to decline, left the patient to all appearance perfectly well, with the exception of a slight halt in his gait, which entirely disappeared after a few weeks. I heard nothing of him until about the middle of August following, when he again called upon me, saying that the disease had returned, which, upon examination, I ascertained to be the fact. The tumor had returned to nearly the size to which it had attained at the time of the operation, but had not the same elasticity, and was more solid to the feel ; nevertheless, pulsation was distinctly to be perceived in the tumor, and could be detected in the femoral artery quite up to the point at which the ligature had been applied, as well as in the tibeal branches, but with diminished force.* Under these circumstances, I at once determined to make trial of the plan pursued by the surgeons in Dublin, that of compression ; but not having the instrument used by them, or any distinct account of it at the time, I was left to my own resources, and contrived the one illustrated in the plate accompanying this communication. Preparatory to the application of my instrument, the patient was directed to remain quietly in bed for three or four days, which being complied with, the instrument was adjusted, and pressure exerted upon the femoral artery, so as to arrest completely all pulsation in the tumor; after an hour or more, it became necessary, in consequence of pain produced by pressure, to shift the pad an inch or more from the point just compressed, and so changed from time to time, as circumstances required ; but having one plate or pad instead of three, (the other two being an addition of Dr. Rodgers, which certainly is an improvement,)

---

* A case very similar to the above is related in the Lancet, by Sir A. Cooper, when the aneurism was reproduced after having been cured, as was supposed, by taking up of the femoral. The limb was afterwards amputated by Sir A. Cooper, who upon an examination of the parts, found that the femoral artery below the place of the ligature had been conveying blood. It does now and then happen, he remarks, that a blood-vessel will arise from the artery, close above the ligature, and pass into the femoral artery immediately below it, by which means the circulation is produced. Such cases, however, are extremely rare.

I was compelled to make compression upon the artery as it passes over the pubis, while changing the position of the pad. The instrument was thus continued until after the fifth day, when finding no pulsation in the tumor, it was removed. After the lapse of a fortnight or more, a slight thrill was to be detected in the aneurismal sac, when the instrument was re-applied for thirty-six hours longer, varying the pressure on the artery as circumstances required. Pulsation or thrill being no longer discoverable in the tumor, which had now become more solid, compression was taken off; since which time the patient has been able to take exercise, and attend to his usual occupation, being perfectly restored to health.

Gratified with the result of the foregoing case, and finding the instrument afterwards successful in the hands of Dr. Rodgers, I have been induced to publish an account of it; preparatory to which I examined the surgical records, with the view of ascertaining the various contrivances that had been used for the compression of arteries; when to my surprise I found detailed an account of an instrument similar in principle, but differing essentially in the mode of establishing pressure. It was the invention of Mr. Blizard, and was tried by him as early as 1802, but without success, when it was abandoned. I do not remember to have seen a notice of it before, if so, it had entirely escaped my recollection. I beg, hewever, to refer the reader to the 8th volume of the Medical and Physical Journal of London, where every thing relating to Mr. Blizard's case and instrument will be found.

The instrument used by me, consists (as it will be perceived by reference to the drawing) of a quadrangular rod of iron, passing up on the outside of the thigh to its full length, of sufficient strength to sustain the force required. At its upper extremity it is connected with a broad concave pad by a neck of iron, about an inch long, coming off at right angles with it. The pad is to rest upon the trochanter major, and is to be retained in its place by a strap passing round the pelvis. The lower extremity of the rod has a similar neck of iron, but which is two inches long and slides upon the rod, so as to accommodate the instrument to the various lengths of limbs; the pad connected with it is also broad and concave, that it may the better repose upon the outer condyle of the femur, and is retained in its place by a strap passing round the knee. Two plates of iron, six or seven inches broad and eight inches long, connected together, are threaded in the centre by the rod so as to slide up and down; to the upper and lower edge and on the outer side, knobs are attached for the fastening of straps to be connected with three plates of iron of sufficient thickness, about two inches and a half broad and six inches long. These plates have knobs at the upper and lower extremity on the outside, for straps to be attached connecting them with the outer plate. These three plates are pierced in the centre for a screw, which is to have connected with it a pad similar to the common tourniquet pad, only larger. The straps connecting the plates can be shortened or lenghened at pleasure, so as to bring the pad of each to bear directly upon the femoral artery in its winding around the bone.*

By this arrangement it will be perceived that I have successfully avoided compressing the collateral branches of arteries by making the *point d'appui* between thet rochanter major and the outer condyle of the femur, while the resistance offered is alone from the inner side of the thigh bone, with the femoral artery intervening.†

Much has already been written of late upon the cure of aneurism by compression, by most of the leading surgeons of Dublin. It appears to have been revived by them, and adopted in practice in place of the ligature. An excellent and elaborate treatise has been published by Dr. Bellingham on this subject, from its earliest history down to the present time; he has also done ample justice to those claiming any agency in establishing this operation. It is not a little surprising that the French surgeons, after the success attendant upon compression in the cure of popliteal aneurism, as is evinced by the many cases reported by them in the different surgical works of France, should have allowed this operation to fall into disuse. I cannot but attribute it to a want of knowledge of the true pathology of the disease, or of the changes so necessary to take place in the aneurismal tumor to effect a cure.

For a minute detail of instruments and of the history of the treatment of aneurism by compression, as well as the true pathology of this disease, I must refer the reader to that excellent work, entitled Observations on Aneurism treated by Compression, published in London, by O'Bryen Bellingham, M. D., Edin.

ART. III.—*An Account of a severe Form of Epidemic Miliary Fever, which appeared at Fort Snelling, Upper Missisippi, in the Winter of* 1847–48. By GEORGE F. TURNER, M. D., Surgeon, U. S. Army.

FORT SNELLING, March 22d, 1848.

To the Editor of the New-York Journal of Medicine, &c.

DEAR SIR,—I have been induced to send you this imperfect sketch, from the belief that the severe form in which this epidemic has appeared is peculiar, and because very high authorities have denied the existence of miliary fever as a primary disease. I do not know that it will be of any interest to your readers.

During the past winter there has prevailed here, and in this vicinity, an epidemic miliaria of serious character, confined almost exclusively to children, which, so far as I know, is in many respects peculiar.

---

* The instrument will have a less cumbersome appearance, and the plates be protected from rust, by having them covered by chamois or soft leather.

† This instrument is made by George Tiemann, Surgical Instrument Maker, No. 63 Chatham-street.

The first two cases occurred almost simultaneously, about the 20th December, 1847, in children of the same family, and proved rapidly fatal, and since that time the disease has moved slowly but steadily on, attacking family after family, till there now remain but few subjects for its visitation.

In its access it resembles the eruptive fevers generally; the leading symptoms being, in a majority of cases, vertigo, drowsiness, rigors alternating with flushings, pains in the back and lower extremities, great lassitude, coldness of the feet and hands, followed, generally in the course of twenty-four hours, by soreness of the throat, the inflammation usually beginning in the tonsils, which are early dotted by ulcerated points, the fauces soon becoming inflamed, and subsequently the mucous membrane of the nose. The tongue at this stage usually presents a peculiar appearance, as if rubbed with chalk; the papillæ showing above the white ground of a dark red hue, and the breath is now intolerably offensive. The febrile action, which is highly inflammatory, being now fully developed, the skin is hot and red, accompanied by a sense of pricking and itching which is sometimes excessive, and delirium is apt to be present, and in favorable cases the eruption, (attended by a general roughness of the surface, constituting cutis anserina,) begins to appear within forty-eight hours from the first indisposition. The eruption shows itself first on the loins, and extends gradually over the back and abdomen, and often over the entire surface; the face being the last to show the rash. It is distinctly vesicular, rendering the skin rough and of a deep red; disappearing on one part and appearing on another; the desquamation, in branny scales, commencing in favorable cases about the third day from its first appearance; though in many cases the eruption has re-appeared from time to time, not in the vesicular form, but merely showing beneath the cuticle, for three, four, and five weeks after the subsidence of the original disease. In one case a second eruption occurred three weeks after the disappearance of the first, closely resembling rubeola; the patches being interspersed with the weals of urticaria, and this was fatal, from the supervention of peritonitis on the sudden retrocession of the eruption.

An excessive eruption has not been as favorable as when less extensive, leaving one part to appear on another. The former cases have been attended by an increased degree of inflammation of the fauces and mucous membrane of the nose, and have been followed by more and severer sequelæ.

The most severe cases have been those where the eruption from the first has been barely visible, and where gastric irritability has been great.

With a few exceptions, bronchial symptoms have been slight, or altogether wanting.

In the most favorable cases convalescence has commenced about the seventh or eighth day, though few cases have progressed to perfect recovery without relapses from sequelæ more painful and serious than the original disease. In fact, this disease, (except where alarming symptoms have early appeared,) has not assumed its most formidable character until after the eruptive stage has terminated. Convalescence has been tedious and uncertain; and enlargements of the parotid and cervical glands, otitis, with abscess within the ear, muscular pains resembling rheumatism, and anasarca, have formed the usual sequel. Of the forty-two cases which have come under my care, thirty-seven have been children under twelve years old, (and this number embraces nearly all the children in this immediate vicinity,) four were adult females, and one male. Six deaths have occurred thus far. One from laryngitis, one from meningitis, two from bronchitis, all rapidly fatal, (the eruption having never been fully developed, but only slightly perceptible, and that in a very limited extent,) and two from peritonitis, relapsed cases, after four or five weeks from the subsidence of the original eruption. Many cases which have recovered have been of a most serious character, and altogether the disease has been formidable. As to its mode of propagation, I cannot compare it with any epidemic I have seen. As a general rule, where it has entered a family, none of the children have escaped, but have all suffered within from three to six or seven days; though there have been a few striking exceptions. In one family, two children had the disease, and after an interval of seven weeks another took it, and then a fourth after the lapse of five weeks, and a fifth a few days subsequently; the remaining three having thus far escaped.

In this garrison, of eleven children occupying adjoining quarters on one side of the parade, ten were attacked, and not till six weeks after the last case, did the children on the opposite side begin to suffer.

The disease is probably, under favoring circumstances, slightly contagious. I have seen, in previous years, isolated cases, and its prevalence this season seems to depend on some inappreciable atmospheric peculiarity.

It has prevailed epidemically among the Sioux Indians of this vicinity while on their winter hunt, attacking indiscriminately all ages and sexes; but with them, from causes probably connected with their mode of life, it has been comparatively mild. In the memory of the oldest Indians, this epidemic has occurred amongst them twice before, and is peculiar to the cold months in this climate.

The treatment of this disease has been dictated by general principles. Emetics of ipecac., when not contra-indicated by gastric irritation, have proved of decided benefit, when given at the very onset, and subsequently mild cathartics through the whole course of the disease; though the persevering use of tepid sponging has been of more essential service than any other single remedy; allaying excessive heat of the skin, and general vascular excitement, obviating delirium and restlessness, and promoting sleep; thereby diminishing materially the risk of local congestions and inflammations; which have constituted the chief danger in recent cases.

Rooms highly heated by stoves, with imperfect ventilation, and too much bed covering, have proved in the highest degree pernicious during the eruptive stage; aggravating in a marked degree every serious tendency.

During the tedious and lingering convalescence, tonic, and alterant treatment has been indicated.

ART. IV.—*Cases of Pneumonia Typhoides; with Remarks on the Use of Acetate Plumbi, in this Affection.* By MOSES C. HASBROUCK, M. D., of Rockland Co., N. Y.

To the Editor of the New-York Journal of Medicine.

DEAR SIR,—I send you the notes of three cases of pneumonia typhoides, or of what I am in the habit of terming "asthenic pneumonia." They are intended to show the beneficial influence of acetate of lead, and if you deem them worthy of publication you will oblige me by giving them a place in your Journal.

Case 1st.—Mr. G. S., aged 38, of sanguine temperament and good constitution, after a day's ride, exposed to a cold and damp atmosphere, went to bed with a severe chill, violent headache, severe pain in the back and limbs, and soon after he became delirous. I saw him eight hours after the attack, and found him with a rapid and feeble pulse, constant delirium, and with the whole surface of his body and limbs bathed in perspiration. He was also expectorating profusely a sero-mucous fluid of a brick-dust color. His tongue was clean. His right side from the spine forwards, and the scapula and axilla downwards, to the border of the ribs, gave out minute crepitation. His bowels were loose.

℞. G. Opii, grs. iv.
Calomel, grs. viij.
Tar. Emetic, gr. j.
M. f. in Pulv. viij., one of these to be given every third hour.

These powders with slight modifications to suit occurring symptoms were continued until the morning of the third day, when it became evident that unless something was ordered to check the inordinate perspiration and expectoration, which still continued, the patient must sink. Bronchial breathing had taken the place of the crepitus, and the prostration was great. Acetate of lead was now given, combined with suitable doses of calomel and opium. In less than thirty-six hours, the perspiration and expectoration were reduced to an ordinary quantity; the pulse was below a hurdred, and the delirium gone. Crepitant râle in right side returned. The gums had the blue border, and gave slight evidence of the action of calomel; convalescence was almost or quite established.

Case 2d.—Mrs. H., aged 45, of feeble constitution, had been frequently sick, and was at the time of the attack worn down by nursing. She was taken with a chill, followed by severe headache and neuralgia, pains of the back and limbs, and a violent lancinating pain in the left side near the border of the ribs extending thence to the shoulder of the same side. She had a dry cough with trifling frothy expectoration, pulse 120 and feeble, tongue slightly coated white, and moist, skin hot and dry. Percussion clear and a perfectly natural, vesicular murmur. Two days after plueritis extended to the lungs proper; the pain abated and a brick-dust colored expectoration appeared. Uterine hemorrhage also set in, not profuse, but sufficient to increase rapidly the debility. To check this hemorrhage, rather than with a view to operate on the pulmonic inflammation, I gave acetate of lead, two grain doses, every four hours, united with calomel and opium, which she was taking. The next day the hemorrhage was less, but not entirely arrested, and all the other symptoms decidedly better; and what may be particularly mentioned, the skin was moist. The following day, slight effects of calomel and lead on the gums were evident; continuing the same medicine in diminished doses, convalescence was established, accompanied with a very sore mouth.

Observing the sudden effect of the lead here, and reflecting upon it, in connection with the case of Mr. G. S., I resolved to give it a trial in the next case which might occur, even should there be no excessive evacuation which it might be desirable to arrest; solely with a view to its alterative effect upon the capillary structure.

Case 3d.—Mr. P. W., a young man of good constitution, sent for me at 6 A. M., the 12th February last. He was taken the night before with a chill which lasted an hour, which was followed by heat and pain in the right side, near the border of the false ribs. He had complained of severe pain in the head also, but was now delirious. His pulse was 120 and feeble, tongue coated with a thick yellowish coat, and moist, skin hot and dry; he had vomitted a number of times and had frequent discharges from the bowels; coughed frequently without expectorating. His breathing was oppressed, his countenance contracted, eyes icterode and dull. Râle crepitans over the right latteral region of the chest.

℞ Tar. Emetic, gr. ss.
Sulph. Magnesia, ʒ ss.
Once in four hours.

The next day's report was, that he had not vomitted since he took the medicine, and his bowels had moved twice only. Delirium continued, pulse 110, and skin moist, slight dulness on percussion, and tubular breathing had taken the place of the crepitus. Same medicine continued.

14th. All was worse, constant delirium; the eyes had the peculiar typhoid stare; coughed little, expectorated nothing; pulse small and 130, skin dry.

℞ Calomel, gr. ss.
Pulv. Ipecac, and Opii, āā gr. ss.
Every four hours.

15th. No amendment.

℞. Calomel, gr. j.
Opii, gr. ¼.
Camphor, gr. ij.
Every two hours.

16th, 10 A. M. Still worse, no cough, rapid bronchial breathing of the "blowing kind," quite up to the scapula and clavicle. I now added to the last prescription two grains of lead, every two hours.

17th, 9 A. M. When I entered the room this morning, he looked up, and with a natural expression of countenance, and in a perfectly rational manner, jocosely asked me whether I was trying in how short a time I could treat a man to death. And he was sweating profusely, with pulse down to 100, and breathing comparatively easy. Cough had returned also, with a free expectoration.

On the 18th the gums were slightly affected, and a rapid convalescence followed.

We are aware that the recovery of three patients from attacks of severe inflammation during the use of acetate of lead, stated as a simple, isolated fact, can be of but little value. But if these cases, in their symptoms, all point to a certain pathological condition, state, or stage of disease, in which the ordinary remedies seemed to lack power to effect a favorable change, and which change seemed to be produced by lead; and if to this fact we can add a rational explanation, founded upon an analogous operation of lead in other diseases, we certainly go as far as three cases, under any circumstances, can enable us to go, in establishing a principle.

Those who are familiar with the "First Principles of Medicine, by Archibald Billings;" and, I should say, assent to his views of the nature of inflammation—that is, that the proximate cause of inflammation is a relaxation of the capillaries, and that sedatives, (antimony and neutral salts,) as well as alteratives, are absorbed, and thus brought in contact with these vessels, and through an operation on their nervous tissue, cause their contraction—will have but little difficulty in understanding the rationale of the operation of lead in low grades of inflammatory action. They will at once recognise, in the foregoing cases, an extreme relaxation of capillaries, (it was so great in the first two, that the fluids ran out, as it were, of their open extremities,) and they will at once impute the sudden and remarkable change to the well known astringent properties of lead.

In acute sthenic pulmonic inflammation, the nervous system with its energy unimpaired, excites the heart to a vigorous action, which drives a full current of blood into the relaxed, but not yet entirely palsied capillaries, and becomes the efficient agent in keeping up, if not in producing, the disease. Hence, in the treatment of this inflammation, blood-letting is the first and principal remedy. In cases less sthenic, but yet not *asthenic*, we have less cardial and vascular action, with more injury of the nervous system; and hence with a slight bleeding, and perhaps without it, we call in immediately, and with more power, sedatives, (antimony and salts,) and promptly obtain the same result, the relief of the distention of the minute vessels of the inflamed tissue. But again, in some cases of sthenic inflammation, whether highly or moderately sthenic, notwithstanding the use of venesection and other evacuants, antimony and salts, we fail in obtaining that relief to the extent which is sufficient to insure to the case a favorable result. In this situation we resort to the alterative (constringent) effects of calomel, and often combine it with opium to counteract its purgative quality, and also for the purpose of allaying the excitement of the nervous system. But calomel failing, the inflammation runs its course; and upon the extent of the destruction of parts, in relation to the remaining recuperative energy of the system, depends the farther continuance, or not, of life. Tonics and stimulants will sometimes assist the system in sustaining the shock, and in rallying, to the work of reparation, its prostrated energies.

In asthenic cases we have a great deterioration of the nervous power, and as a consequence an extreme relaxation of the capillaries; and as the heart acts feebly, there is no extra forcing of blood into them to arrest, and consequently no bleeding to be practised. A moderate evacuation of the bowels may relieve the nervous oppression and promote the absorption of medicines, and sedatives may have a limited application; but in so far as the main principle of treatment is concerned, we must commence, where, in the *asthenic*, very often convalescence is established; we must resort almost immediately to the constringent effect of calomel. And as effectual as this medicine is acknowledged by all to be in cases of acute inflammation, in which convalescence does not follow sufficient depletion; we yet all know that depletion must precede it, that it can effect nothing alteratively (constringently) so long as the heart pumps, with violence, blood into the inflamed tissue. And equally powerless is it in the extreme reverse condition of the system and circulation, in which not enough of nervous energy exists to impart to the tissue susceptibility to its action. As in the first its way must be prepared by depletion and sedatives, so in the last, or latter condition, tonics and sometimes stimulants must accompany it. But there is a point in the progress of inflammation, a little preceding that which calls for stimulation, just before there is that extreme prostration of the nervous influence which denies to the vessels power to contract under the operation of constringents, in which we feel that upon the alterative effect of calomel rests the life of the patient; and often at this time a diarrhœa sets in, and through it, or in absence of it, through some other cause, calomel lacks the power to insinuate itself into the circulation, or, insinuated, to produce its effect, and the patient continues to sink until nothing but the very small hope of stimulation is left. Such cases have frequently occurred to us in asthenic pneumomia; and in such, as the foregoing reports show, acetate of lead has seemed to afford us an efficient aid. Whether of itself it alters the condition of the inflamed part, or only enables calomel to do so, we cannot say, for we have not ventured to give it alone; but we have observed the blue tinge of the border of the gum to accompany from the commencement the mercurial influence.

Lead has in these cases undoubtedly a similar operation to what it has in hemorrhages and dysentery. So long as the hemorrhage is what we call active, that is, accompanied by excessive action of the heart and arteries, with heat of surface, &c., lead cannot arrest it permanently; the lancet and antimony are the proper means. But when the circulation is subdued, and the surface moist, it is very effective. Indeed it has appeared to us, that in cases in which excitement has been sufficiently subdued to allow it to act; but not enough to place the circulation below the standard of health, it has injured, by inducing a sub-inflammatory congestion (particularly in hæmoptysis) which has led to a rapid disorganization of the lungs.

On the other hand, in hemorrhages of a low passive character, not lead, but tonics are indicated, or the two combined. In extreme prostration from uterine draining, quinine and zinc united with stimulants will cut short cases which have resisted large and long-continued doses of lead.

In dysentery we are satisfied, from extensive observation, that it is the stage intermediate between high excitement and great prostration, in which it is useful. Given during high, or even moderate vascular excitement, it tends to increase pain, tormina and fever, and in great debility it is ineffectual. In the same stage of gastro-enterite, complicating, continued fever, it is highly useful; in excess of excitement and in collapse, injurious.

ART. V.—*Remarks on the Pathology of Epidemic Erysipelas.* By H. N. BENNETT, M. D., of Bethel, Conn.

To the Editor of the New-York Journal of Medicine, &c.,

DEAR SIR,—I wish to call your attention to, and obtain your *critique* upon a point of pathology to which I merely alluded in my article on epidemic erysipelas, in the May number of your Journal. No disease presents a greater variety of local lesions, and at the same time a more uniform train of general symptoms, than that to which I have just referred. In one case, we have a simple angina, preceded and accompanied by more or less constitutional disturbance; in another, the angina is complicated with erysipelas of the face; in a third, the previous local difficulties may be still farther complicated with diffuse cellular inflammation of a limb, with a meningitis, with a pleuritis, &c. So various are these lesions, that some writers have asserted that *every tissue* of the body is liable to be attacked. The multiform grouping of the different local inflammations in particular cases, proves most conclusively the identity of their nature, as well as the unity of their cause. The recent epidemic in this town presented numerous cases in which various groups of topical inflammations were manifest. So frequent was a succession and combination of structural lesions in the same case, that it was unsafe to make a favorable prognosis, except in the very mildest forms of the disease.

I intimated in the number of your Journal to which I have before alluded, the view which I entertain, explanatory of this great diversity of local lesion, viz: *that the areolar tissue is the primary seat of every true erysipelatous inflammation*, so that the disease might be emphatically termed *areolar fever*. Allow me briefly to illustrate this view. The cellular membrane is the most widely diffused of any of the tissues of the body, forming not only the envelope of all the organs, but serving also as the cement of their various parts, and filling up their interstices. This tissue, so widely diffused, is at the same time a continuous tissue, and its continuity is scarcely interrupted, being subject only to the circumstances of greater or less density according to the location which it occupies, or the office which it subserves. The sub-cutaneous cellular tissue is of loose texture, capable of great distension in various pathological conditions, while that which forms the envelop of the different muscular fasciculi, is condensed and possessed of a great degree of firmness. The membranes termed serous, are acknowledged to be but a mere modification, a condensed form of cellular tissue. The fascias, the peritoneum, the pleura, the cerebral and rachidian meninges, are a series of envelops, composed of the same anatomical elements. In a healthy state, they all secrete a fluid similar in physical properties and chemical composition. The areolar structure enters in large proportion into the *composition* of organs, so that they are not only surrounded by, but embedded in it, and it may be thus made not only to represent an atmosphere, as observed by Borden, but also a soil within which the viscera are implanted.

The hypothesis that this tissue is the primary anatomical seat of the local inflammations developed in the course of the disease termed epidemic erysipelas, or erysipelatous fever, readily accounts for the great topical diversity of these inflammations. Conceive that it is the areolar tissue for which the poison producing erysipelas has an elective affinity, and you are led at once to conceive also, every location for its morbid products. The submucous tissues of the throat, form the point of departure for erysipelatous angina; and this idea receives confirmation from the appearance of the fauces in certain cases in which the parts appear tumefied, pale and semi-transparent, the evident result of a serous effusion from the areolar tissue, and precisely similar to external œdematous erysipelas. The face is peculiarly liable to erysipelatous inflammation, and here the abundance of the cellular membrane is remarkable. In short, every portion of the body in which this tissue exists, is liable to be attacked by the disease. The skin and mucous membranes, into the composition of which the areolar structure enters largely, the serous membranes, the fascias, &c., &c., are alike liable to its invasion. Diffusion is a peculiar characteristic of erysipelatous inflammation, and the continuity of the cellular membrane is eminently adapted to this character. A cellular inflammation commencing in the axilla, rapidly extends over the whole trunk, an erysipelas commencing upon the nose, spreads rapidly over the whole head; is it not because the areolar tissue is the primary seat, nay, even the limit of the inflammatory process?

Give a little reflection to this idea, Mr. Editor, and see if it is merely a creature of the imagination. I am disposed to think that after due consideration, you will at least conclude with an old divine, (in reference, however, to a very different subject,) that, " it is not so sure there is nothing in it."

Art. VI.—*An Essay on the Nature and Curability of Heterologous Tumors.* By N. S. Davis, M. D.

In a former number of this Journal, a variety of facts and statistics were presented, which appeared, to me at least, to show conclusively that heterologous tumors are, in all cases, the result of a previously-existing disturbed or unnatural condition of the system; in other words, that they are never, primarily, mere local diseases. And were it necessary, many other facts might be gathered from our medical literature, tending to corroborate the same inference. It may be said, however, that although scrofulous, tuberculous and typhous deposits are acknowledged to be *results* of constitutional causes, yet the fact that one-fifth or one-tenth (which I think nearer the truth) of the cases of cancer, are permanently cured by a removal of the local deposit or tumor, proves some cases, at least, to be strictly local in their character. But would it not be more in accordance with sound reasoning to infer that these exceptions, for such they must be regarded, are cases in which the primary cause, acting through the constitution, has ceased, while the effect only, in the form of the tumor, remains. That there are well-marked cases of carcinoma, in which the local disease progresses to a certain extent and then remains entirely stationary through an indefinite number of years, is well known. And they can be explained in no other way than by attributing them to some cause or causes, which having ceased to act, the local result or tumor ceases to progress. This view is also strongly corroborated by the statistics adduced in our last number. Thus, of 1172 patients affected with cancer and never operated on, 4½ per cent. lived over 20 years after the first appearance of the disease, and 20 per cent. more, from 6 to 20 years; while of 801 operated on in various ways, only 2¼ per cent. lived over 20 years, and 11 per cent. from 6 to 20 years. These facts not only show that such tumors may become fully developed, and that condition of the system which gave rise to them so far cease as to leave them stationary or very nearly so, but they militate very strongly against the idea that the constitutional symptoms arise secondarily from the absorption of cancerous matter by the capillaries connected with the local disease, and its mixture with the circulating fluids.

For if this were the case, such absorption and its constitutional effects ought to go on uniformly increasing so long as the tumor is suffered to remain. If it be granted that all heterologous tumors are the result of causes acting through the system, and not merely on the locality where the tumor appears, then a question of the highest practical importance presents itself for consideration, viz.: what are the circumstances and conditions of the system which give rise to such morbid deposits? In discussing this subject, it must be constantly borne in mind, that the matter constituting the class of tumors in question, is not a simple degeneration or morbid alteration of the tissue or structure in which it makes it's appearance; but a genuine deposit of new matter in a previously-healthy structure. Hence, it must proceed either from unnatural materials contained in the blood or nutritive fluid, which the organs of excretion fail to throw out of the system; or from a perverted action of the capillaries of the part in which the deposit appears, of such a character as to make, out of healthy blood, unnatural structures or deposits.

This latter supposition which makes the disease a strictly local one, I have already shown to be extremely improbable, and therefore the former is the only alternative left us. But the blood itself is only a product of the action of the digestive and respiratory organs on the materials supplied for nourishment; and a little reflection will satisfy the reader that it can be altered from the healthy standard in only three ways. First, by deficiency or fault in the action of some one or more of the organs which convert the nourishment into blood; second, by the direct absorption of noxious or indigestible materials; and third, by the failure of some one or more of the organs of excretion to separate from the blood those materials that have become either useless or hurtful in the system. Owing to the composition of the class of tumors under consideration, and the great variety of circumstances under which they occur, it can hardly be supposed that the second mode of altering the composition of the blood, has any part in their production. And if not, then we are permitted to limit our search after the primary link in the chain of morbid actions which result in the formation of these tumors to two sets of organs, viz.: those of digestion or sanguification and excretion.

If the first set of organs are affected, the proximate constituents of the blood may be imperfectly elaborated; if the latter, then those materials which naturally go to make up the various excretions may be retained; and in either case the blood will necessarily deviate from that normal condition favorable to healthy nutrition, and present all the conditions necessary to the formation of unnatural deposits or tumors. If an attempt be made, however, to trace all the varieties of this class of tumors, or even all cases of any one variety, to primary disturbance in the action of one organ or set of organs, it will most likely fail. And for the simple reason that the condition of the blood essential to their formation, may arise from primary derangement either in an organ of assimilation or excretion, or both conjoined. Thus, by an imperfect digestion of food the blood may be charged with an unusual amount of carbon, for instance; and it is evident that the same state might result from a failure of the lungs or liver to separate the usual quantity of that substance, notwithstanding the digestion should be perfect.

It is now well known that dropsy is a mere symptom or result of diseased action; but the particular nature and seat of such disease may be very various. Hence we have diseases of the heart, liver, kidneys, spleen, serous membranes, &c., all giving rise to one common condition, viz., dropsy.

Precisely in the same light would I view all heterologous tumors or deposits. They are symptoms or effects of disordered action in some organ or organs, which directly or indirectly influences the condition or composition of the blood. And as these tumors differ from each other in their seat, their progress, their internal structure, and the period of life at which they generally appear, so do they doubtless arise from disordered action in different organs, and different degrees of derangement in the same organs. So well satisfied am I of the correctness of these views from the researches already made, that I do not believe another quarter of a century will pass away, before the appearance of a particular form of cancer will point the mind of the scientific physician to specific disorder in some particular organ or organs, with as much certainty as the appearance of the different varieties of dropsy now do. Until that time comes, their treatment must continue, as it has been for centuries, wholly empirical; and consequently unsuccessful.

If we look at the most accurate analysis of tuberculous and cancerous deposits, we shall readily perceive the analogy which exists in their composition and some of the natural tissues of the body. Thus, according to M. Theucht, of Strasbourg, 72 grains of a fully-developed scirrhus of the mamma, was composed of 2 grains of albumen, 20 of gelatine, 20 of fibrine, 10 of fluid fatty matter, and 20 of water and loss. The same author also found 72 grains of a scirrhus uterus to consist of 15 grains of gelatine, 10 of fibrine, 10 of oily or fatty matter, and 35 of water and loss. According to the recent analysis of Foy, scirrhus matter contains, albumen 42 per cent., fatty matter 8.25, fibrine 5.85, water 5, and small proportions of salts of lime, magnesia, soda, and potassa. The same author gives the composition of encephaloid as follows, viz.; albumen 47 per cent., fatty matter 12.85, osmazone 4, fibrine 6.50, water 8, and several salts in small proportions.

Analyses of several other authors might be adduced, but these are sufficient to show not only that the different varieties of these tumors differ from each other in composition, but also that different specimens of the same variety exhibit almost equal variations. These facts strongly corroborate the idea that the materials of which these tumors are composed, are derived from the blood; and also, that the morbid condition of this fluid may depend on a variety of functional disorders, corresponding with, and giving rise to, the variations in the composition of the morbid deposits. Thus the investigations of Phillips, as well as our own daily observations, leave us no room to doubt but that the condition of the blood which gives rise to scrofulous tumors, is directly dependent on errors or deficiencies either in the supply of nourishment or its assimilation by the digestive and pulmonary organs. But in most cases of carcinomatous disease, I think we have more reason to search for the primary link of morbid action in the organs of excretion than those of assimilation. Indeed, in regard to the first-mentioned disease, which almost always makes its appearance in childhood and youth, its origin in bad hygienic management in reference to food, air and clothing, (when not traceable to a hereditary predisposition,) is so universally conceded, that no detailed proof need be adduced. Here there is no difficulty in tracing the order of morbid phenomena. The insufficient or unwholesome nourishment, the impoverished or deteriorated state of the blood, and the scrofulous deposits or enlarged glands, are phenomena so clearly bearing the relation of cause and effect as to leave no doubts on the reflecting mind. But the prevalence of two ideas which seem to me erroneous, have tended in no small degree to prevent that kind of investigation into the real pathology of carcinomatous and tuberculous deposits, which is so essential in order to obtain accurate and valuable results. The first consists in the supposition that these diseases originate in some profound and inveterate, but yet intangible and undefinable morbid condition of the constitution. Hence, instead of a rational search after the particular organ or organs whose derangement may have given rise to the imperfect assimilation or excretion and the consequent deposit, the most powerful remedies, such as the preparations of mercury, iodine, arsenic, &c., have been at once resorted to, under some vague notion of their possessing a specific power to change the morbid constitution. But what is meant by a morbid constitution, or a "constitutional disease," of which we so frequently hear, both in books and practice? Is it a well-defined, specific, tangible something; or is it one of the many phrases used to conceal our ignorance? By constitution, I suppose is meant the particular condition of the *tout ensemble* of our physical organization, including solids and fluids. And if so, a *constitutional* disease must be one that affects the whole organization. The animal system, however, has certain inlets and outlets, certain mediums or avenues through which alone impressions, both healthy and morbid, may be made on it.

Hence, it is evident, that a vitiated or diseased state of the constitution, subsequent to birth, can only be generated by the influence of some morbific agent or impression, acting through some of these avenues. Thus, if a child is supplied with insufficient or unwholesome food, its digestive apparatus is incapable of furnishing a sufficient quantity of healthy blood, consequently the whole system becomes debilitated, nutrition is inadequately maintained, and we have fully developed, a constitutional disease termed scrofula. Again, we may have the same result, from causes acting through an entirely different set of organs, viz: the skin and lungs; as when a child is exposed to the cold, damp, and vitiated air of cellars and ill-ventilated apartments. The same views are equally applicable to cancerous and tuberculous diseases. As has already been stated, the local disease or cause is but the result of a constitutional deviation from health; and this constitutional deviation is, again, the result of some morbific agent or impression acting on or through one or more of the organs of the system. Thus, as in scrofula, through the fault of the digestive and respiratory functions, the food may be imperfectly assimulated, and the whole mass of the circulating fluids thereby become vitiated. Or through the imperfect elaboration of urine, bile, catamenial fluid, &c.; materials may be left in the blood which give rise to the same general deterioration of that fluid. And, again, the same general result may be obtained from deficient innervation, caused by long-continued depressing mental and moral emotions. Hence, it should be the first business of the pathologist, in every case of constitutional disease, whether it be scrofulous, cancerous, febrile, or what not, to determine through what set of organs or agencies the constitution became diseased; and also whether the same morbid influence is still at work, or whether it has ceased, leaving only its effects. With this knowledge, the indications of treatment become clear and rational; while without it all is blind empiricism. It seems to me that one prominent reason why no more well-defined and satisfactory results have been obtained in regard to the proximate causes, or in other words the real pathology of the diseases under consideration, is on account of the very natural and prevalent idea, that diseases of such obstinate and malignant character, must have their origin in some strongly-marked and inveterate morbid action, consequently all minor derangements or morbid influences in the system, are either entirely overlooked, or at once regarded as mere effects of the *local* disease on the constitution. But I think a little reflection will satisfy every intelligent member of the profession, that no idea could be more erroneous, or its effects more injurious to the welfare of the patient. To be fully satisfied of this, let us turn our attention a moment to the results of every day's observation. One man makes a meal of positively-indigestible food; another spends an evening in surfeiting and drunkenness; and both suffer in a few hours from well-marked derangement of the digestive organs. Again, one gets wet feet and suddenly checks his perspiration; another inhales the miasm of a malarious district, or the infected air of a crowded ship; and the first suffers an attack of inflammation, the other of fever. While no one expects the development of a scrofulous or carcinomatious swelling from such a cause. But if, instead of the meal of positively-indigestible food, or the suddenly-checked perspiration, or the miasmatic air, we give a child, day after day, insufficient or coarse and partially-digestible food, and make him sleep in a damp, half-ventillated and half-warmed cellar, what will be the result? Not a speedily developed fit of gastric irritation, an attack of pectoral inflammation, or a fever; but a slow and steadily-increasing impoverishment of the blood, a debilitated and cachectic condition of the whole system, and sooner or later the appearance of heterologous deposits in the form of scrofulous glands, carious bones, tuberculated viscera, or encephaloid tumors. Or, to take a less strongly-marked case, suppose the child, in addition to ordinary healthy food, air and clothing, is freely indulged in the daily use of sugar, candies, sweet-cakes, coffee, tea, &c., we shall have a still more slow and insidious, but scarcely less certain result. The appetite first becomes variable, the digestion imperfect, the blood gradually loaded with an amount of imperfectly-assimilated materials, which the excretory organs find it difficult to throw off; hence, a gradual accumulation takes place, until nature begins to deposit it in the cellular and glandular structures of the system, and now we have a scrofulous or carcinomatous disease. And yet the mother says, her child has never been sick; perhaps has played or gone to school every day, and she knows no cause for the appearance of the local disease. We need not, however, confine our illustrations to the period of childhood, or to causes affecting principally the digestive organs.

We will take the young lady just entering the gay and fashionable circles of society. She follows the usual habit of confining the chest, whether by dress-linings and strong hooks or corsets and lacers, is immaterial; so that neither the natural quantity of oxygen can enter the blood or the necessary amount of carbonic acid be thrown off; hence an accumulation of carbonic acid takes place during the day, which is only partially counteracted by the free and unrestrained respiration during the hours of sleep. Consequently we have not only a slow accumulation of an extremely-deleterious material, but also an inadequate supply of oxygen, which leaves the tone of the nervous system impaired; the organic actions become languid, the feeling of youthful health and vigor diminishes; the lips grow pale, the ruddy glow gradually fades from the cheeks; soon a hacking cough appears with every change of the weather; and finally, before the meridian of life, she goes to the grave—another victim to tubercular phthisis. And yet the cause is attributed, perhaps, to some great grandmother, who may have died from the same disease half a century previous. Or, to take a case still less familiar, we will select a healthy female in the meridian of life, subject her to the loss of friends or children, or tie her to a vicious, drunken husband; in a word, place her in circumstances where she will be constantly under the influence of depressing mental emotions and anxiety, the tone and energy of the nervous system becomes impaired, all the organs feel the loss of proper innervation; consequently the processes of assimilation and nutrition become languid and imperfect, the liver and intestines become torpid in their functions; perhaps the catamenial discharge begins to vacillate or ceases entirely, and now a scirrhus tumor is discovered in the breast or uterus. I have extended these illustrations, drawn from actual observation, perhaps to a tedious length, solely for the purpose of impressing on the mind of the reader, the following all important truths, viz.: 1st. That all *heterologous* tumors are only effects or results of constitutional derangement. 2d. That this constitutional disorder is itself also a result of the influence of morbific agents or impressions, acting on or through some organ or set of organs in the system, whose action is capable of affecting, either directly or indirectly, the condition of the blood. 3d. That the only mode of arriving at the true, and practically valuable pathology of this class of diseases, is to study them in their connection with this primary link in the chain of morbid action. 4th. That while acute diseases are the results of sudden and strong morbid impressions, to which they can easily be traced; chronic diseases, and especially tumors, arise from slight, and sometimes scarcely-appreciable, but *long-continued* or *oft-repeated* impressions, requiring much study and a vigilant observation to trace them successfully in practice. The reader will find abundant evidence, confirmatory of this last proposition, in Phillips' valuable work on Scrofula, and in MacIlwain on Tumors.

(To be continued.)

Art. VII.—*A Case of Strangulated Inguinal Hernia, attended with Sloughing of the Intestine—Cure.* By Alexander Ewing, M. D., of Dexter, Michigan.

During the evening of the 27th of Nov., 1847, I was requested to visit Col. Solomon Peterson, (3½ miles from town,) aged 58 years, of very intemperate habits. Was told that "a hernia, of which he had been the subject for 40 years, was down, and had baffled all the colonel's endeavors to reduce."

On reaching the case, I found a very large mass of intestines occupying the scrotum, which was distended to the size of an infant's head. I learned from the attendants that "the colonel had been on a visit to Pinckney, a village about 10 miles distant, and becoming quite intoxicated, had ridden home over a very rough road, with this great mass of intestines 'down.'"

I found the tumor quite red, and tender to the touch, as during the three previous days, (it having been down that length of time,) the patient had made repeated efforts to reduce it.

I immediately made use of the taxis, which I continued for about 20 minutes, without success. I then administered ant. tart., in a quantity sufficient to produce nausea, and again tried the taxis, which I kept up for an hour and a half, frequently urging the necessity of bleeding, warm bath, tobacco injections, &c.; but he "turned a deaf ear" to all entreaties to allow me to use any further means for its reduction, until the following morning.

Nov. 28th. Visited my patient, accompanied by Drs. Millman, Hollywood, and Clarke. Tumor presented much the same appearance as upon the previous evening, but the tenderness was felt more or less all over the abdomen, with nausea and inclination to vomit, accompanied with hiccough, restlessness—pulse low and languid.

Under this state of things no time was to be lost. We at once made known "our hopes and fears" to the patient, who now willingly consented to any measures we saw fit to propose. Accordingly, we had him placed upon the table, and the operation commenced in the usual manner, but which was rendered somewhat difficult by the very great size of the tumor, which formed nearly a right angle with the abdomen, and could be depressed but little, on account of the great tenderness and tension of the parts. We also found an unusual thickness (perhaps two inches) of dense adipose substance under the superficial fascia, which was undoubtedly rendered so thick (and almost cartilaginous) by the long-continued use of a *poor truss.* The only artery divided was the superficial epigastric, which was immediately secured.

The sac being reached and opened, about half a pint of serous fluid of the most offensive character, made its escape, accompanied with a hissing sound. Having made a division of the stricture, we now commenced to return the gut, which presented a dark, mottled appearance in places, whilst in others it resembled very much in color the substance of the liver, overspread with fibrine. Added to this was that characteristic *dead feel* which we always observe in gangrenous parts. I do not wish to be understood to say, that this mortified condition of the gut extended throughout the whole extent of the protruding portion, but was confined to portions of from one to five inches in length, but not always entirely encircling the gut. But so completely was the integrity of the bowel destroyed, that notwithstanding our most cautious endeavors to restore them to their natural cavity in an unbroken state, we failed, for as the bowel was gently forced up from the scrotum, by an assistant, they would give way under the tips of my fingers in directing them up through the canal, although I used little or no force, knowing their tender state.

But what was now to be done? Of course we all considered the case pretty much if not entirely hopeless, as the bowels were evidently mortified throughout quite a portion of their extent, whilst in smaller portions gangrene really existed. As in several places their coats were broken, and in one place there was a rupture of about 2½ inches in length; out of all of these the fæces was oozing. We now emptied the bowels of a portion of their contents on a towel, through the largest opening, to the amount of half a pint or more. At this stage of the operation there was still a large portion of the hernial tumor unreduced, which, in its present state, it would be madness to return into the cavity of the abdomen. We therefore concluded that it would be best to make a very free division of the stricture above, and also to carry the bistoury down over the pubis into the scrotum, and make a free division of the parts toward the surface, so that, by entirely removing the pressure from the bowels, there might be no obstruction whatever to the free circulation through the parts, and therefore give the best possible chance for their restoration.

Our reasons for not completing the reduction must be evident to every reader, as had we done so the contents of the bowels would have been poured out into the cavity of the abdomen, which would have been likely to have proved fatal in its consequences. And although I am ready to admit that their natural cavity possesses restorative powers beyond most other means, yet I question whether or not the position in which we left the bowels, with a wall of support on every side, (formed as will be presently seen,) enabling them to resist the pressure of their contents, etc., was not paramount to the evils which might follow from keeping them in their present position.

Having succeeded in making a very free division of the stricture, I now introduced my finger down into the scrotum, and turning the bistoury flatways, directed it over my finger until I carried it beyond the parts which were compressing the hernial tumor, when I turned the edge upwards and made a free division of the parts; thus leaving the bowels unconfined throughout their whole extent.

I now brought the ruptured portion in contact with the external wound, which was now brought together in the usual manner, but leaving room for the fæces to escape with freedom.

I should mention that very old and extensive adhesions existed between a portion of the gut and the floor of the inguinal canal.

The patient was now placed upon his bed, and an anodyne administered, with directions to give him whiskey and water in moderate quantities, as he was now very weak, with a small, irritable pulse. (Whiskey was in this case ordered, from the fact that he was in the daily habit of using, his neighbors say, about one quart per diem.)

Nov. 29th. Slept some during the night; has taken some beef-tea and water-gruel; pulse 130, small and irregular; countenance exhibits a very haggard and anxious appearance; no hiccough since the operation; delirium, with incessant muttering about "Mexico and Gen. Taylor"; wound presents a blackened appearance, with the excrement constantly oozing from it, of a dark greenish-yellow color, and exceedingly offensive.

I will not trouble your readers with a detailed account of this case from this time, but will simply note the most important items in the progress and after-treatment of the case.

For several days the pulse ranged from 120 to 140. Tongue dry, and covered with a brownish coat, except the tip and edges, which were red and fiery; some tenderness and tympanites of the bowels. Fæces constantly oozing from the wound until about the fourth day, when we succeeded in getting a passage per ano. After the third day, extensive suppuration was established, accompanied with sloughing of the wound. After the sixth day, the fæces ceased to ooze at the wound, and by the use of gentle laxatives we found no difficulty in keeping up a regular action of the bowels. We allowed the patient whiskey and water in (for him) moderate quantities, with the free use of beef-tea, chicken-broth, water-gruel, etc., etc.

About the sixth day, the patient complained of pain in the scrotum, which continued for about four days, (with redness and swelling, accompanied with more or less febrile action). At the end of this time an opening was made into the scrotum, and about six ounces of pus was discharged; on the following day nearly an equal quantity made its escape. All tenderness of the bowels having some days since subsided, the pulse now became quite regular. Healthy granulations began to shoot forth from the edges of the wound.

On the 13th day from the operation, a piece of whitish-looking substance was found projecting from the wound; on taking hold of it, I found that it offered little or no resistance; I consequently drew it out. It was about six inches in length by three or four inches wide; and was undoubtedly the remains of the hernial sack which had sloughed off.

From this time the patient continued to improve rapidly until about the 8th of January, at which time the wound had entirely healed, but from the first of January he was able to be "about the house" a good share of the time.

As soon as the state of the parts would admit, I commenced gradually to return the bowels, and supporting them by a properly-adjusted suspensory bandage. In this I succeeded to my entire satisfaction, as by the first of January I had so far reduced them as to have the whole mass up out of the scrotum. But on account of the old and extensive adhesions, which existed throughout the course of the canal, it was impossible to make a complete reduction; but the canal was enlarged to such an extent that no difficulty or annoyance whatever is experienced by the patient, who is now attending to his usual business, and enjoying better health than he has for a year or two prèvious.

The parts over the pubis have entirely reunited; so that I have no fear of anything like strangulation taking place in future. In fact, to all intents and purposes, a radical cure has been produced.

It must be evident to all, (taking the circumstances of the case into consideration,) that to have attempted a separation of the adhesions, in the then-existing state of the gut, would have proved imminently hazardous to the patient.

[Whilst reading the proof-sheet of the foregoing article, the New-Orleans Medical and Surgical Journal for May has come to hand, containing a condensed account of the same. The account published in our cotemporary was (it appears) derived from a private letter sent to a Mr. Sears. This much we are compelled to say, in justice to the author and ourselves.—Ed. *N. Y. Jour. Med.*]

PART SECOND.

Critical Analysis.

ART. VIII.—*Practical Observations on certain Diseases of the Chest, and on the Principles of Auscultation.* By PEYTON BLAKISTON, M. D., F. R. S.; Fellow of the Royal College of Physicians, &c. &c., pp. 384, Phila.: Lea & Blanchard, 1848.

WE always welcome with pleasure an addition to the collection of facts in our profession, when these facts are derived, as in the work before us, from cases carefully examined during life, by one familiar with his subject, and as minutely inspected after death. Such cases, reported so as to exhibit their prominent features, and not embarrassed by tedious and unnecessary details, are valuable for reference, and often afford great assistance where general rules alone would be an insufficient guide to diagnosis and treatment.

The work rests for its practical character, on 122 recorded cases, in almost every one of which, as our author informs us, the symptoms during life were witnessed and noted down by him, and in the fatal cases, he was either present at the examination of the body, or inspected the parts after their removal, and hence is responsible for their accuracy.

It commences with a chapter on the properties of Sound, the want of a correct knowledge of which and of the laws of its transmission doubtless embarrasses many when commencing the study of auscultation and percussion.

We have next a full account of the sounds elicited by percussion of the thorax, both in health and disease, and also of the sounds of the respiration and voice, and of the heart, by auscultation, with the explanation of these sounds by different writers, and a chapter on the practice of auscultation, containing most that is valuable of a general nature.

We quote his view of the systolic sound of the heart. "*The systolic sound of the heart is caused by the friction of the muscular fibres of the ventricles* inter se, *and the tightening of the auriculo ventricular valves; strengthened in certain cases, by the impulse of the heart against the ribs, and by the collision of the blood against the orifices of the aorta and pulmonary artery.*" (p. 64.)

We then have between 80 and 90 pages on the formation, termination, causes, and treatment of thoracic aneurism, with upwards of twenty cases, constituting a most valuable part of the work.

He recognises the three principal forms of aneurism of the thoracic aorta, generally admitted, the *dilated*, the *sacculated*, and the *mixed*, though he thinks that many pure cases of the sacculated form have been mistaken for the last mentioned, and that these are not of such common occurrence as some have supposed.

Thoracic aneurism generally proves fatal either by the escape of blood through a perforation of its walls, or from pressure on some vital part near it. Its progress, however, Dr. B. remarks is influenced by its *situation*, *the state of its walls*, and *the nature of its contents*, the effect of each of which is illustrated by remarks as well as by cases.

The only *proximate causes* of aneurism are diminution of elasticity and loss of substance of the inner coats of the artery. As it is proved that increase in the force with which the blood is impelled into the artery by the heart cannot produce this effect, this diminution of elasticity and loss of substance can only result from a morbid alteration of the arterial coats, or a total or partial displacement of their proper substance, by matter possessing less elasticity and cohesion. Such alterations are constantly resulting from a deposition of *horny patches*, *atheroma*, and *calcareous concretions*. These *horny patches*, Dr. B. considers as imperfectly-organized false membranes, deposited on the free surface of the inner coats of arteries. They are not found in all cases of aneurism. *Atheroma* is of a brownish-yellow color, and of a consistence varying from that of pus to cheese or boiled white of eggs, and sometimes still firmer, originating between the middle and inner coats, and in the substance of the latter. Its changes resemble very much those of tubercle. When it softens, it produces ulceration of the middle membrane, followed by rupture or destruction of the inner coat. This is constantly found in aneurisms, and is the most constant proximate cause of them. The *calcareous concretions* are composed principally of phosphate, with some carbonate of lime.

Dr. B. remarks, that "in the present state of our knowledge, we can go no farther than to infer that the deposition of atheroma is a process of abnormal nutrition, depending on a peculiar state of the constitution, which may be denominated the atheromatous diathesis."

Thoracic aneurism prevails especially between the ages of 40 and 50 years, and occurs only in one female to nine males, showing a marked difference against the male sex.

As to the *constitutional* causes of atheroma, all circumstances which materially interfere with digestion and assimilation *may* produce the atheromatous diathesis, but these same circumstances also give rise to scrofula, tuberculosis, &c. &c.

In the *diagnosis* of thoracic aneurism, the following are the results of the careful analysis of thirty-seven cases by our author.

"No diagnostic sign was furnished by the character of the pulse, or by the presence of pulsation above or below the clavicles.

"When a pulsation was seen and felt on a prominent spot in the chest, it indicated the presence of sacculated or mixed aneurism.

"Purring thrill was only valuable as a sign of aneurism, in conjunction with other signs.

"A systolic murmur, heard at a distance from the heart, even though it were not heard at the precordial region, only afforded evidence of the existence of aneurism when it was combined with other signs denoting the existence of a circumscribed tumor.

"A double or diastolic murmur, confined to one spot, at a distance from the precordial region, denoted the existence of a sacculated aneurism.

"When a hollow murmur was heard, a dilated aneurism was present.

"The intensity of aneurismal murmur was in a great measure proportioned to the force of the heart's action.

"Aneurism of both kinds existed without the slightest trace of pulsation or murmur.

"Aneurisms arising within the sac of the pericardium were not indicated during life-time by any characteristic signs." (p. 159.)

In the *treatment* of thoracic aneurism whenever formed, the objects in view are,

1. The prevention of the increase or rupture of a dilated aneurism.

2. The obliteration of a sacculated aneurism, by the deposition of a fibrinous clot within it.

The treatment of *dilated* and of *sacculated* or *mixed* aneurism must be considered separately.

In dilated aneurism, the only alternative that remains is the diminution of the force of the current of blood, and this is accomplished by lessening the amount of blood in the circulation, by reducing the action of the heart by low diet, sedative and purgative drugs, and mental and bodily repose. Caution is necessary in venesection, and also in an extremely low diet, and an immoderate use of purgatives. The use of digitalis requires great caution from the danger of syncope. Dr. B. had long abandoned its general use in such cases, having found poppy and hyoscyamus much more safe in their action. He thinks more favorably of the extract of belladonna, rubbed over the precordial region, than of any other article for tranquillizing the heart's action.

In sacculated and mixed aneurism, the only object is to promote coagulation in the sac by means which will also strengthen its walls and diminish their elasticity. This is to be accomplished by means of sedatives, purgatives, and chalybeates, mental and bodily rest, and the application of cold to the external tumor. Dr. B. has generally given iron in the form of tincture of sesquichloride, with hyoscyamus.

Sometimes the application of cold is so intensely painful that it cannot be borne, and then a cold conium poultice may be used.

We next have a long and valuable chapter on the progress and termination of chronic heart diseases, abundantly illustrated by cases, with a minute account of the morbid changes which take place both in the walls of that organ and in its orifices, and of the effects of such changes. We must refer to the work itself for anything more on this branch of the subject than the following general conclusions of our author from the facts detailed by him in the chapter.

1. A considerable amount of obstruction may exist at the aortic orifice of the heart, without seriously affecting the general health.

2. Mitral regurgitation is one of the most direct and frequent causes of pulmonary venous congestion.

3. Tricuspid regurgitation is the most direct and almost *constant* cause of that engorgement of the vessels of the general circulation, and its consequences, which originate with the heart.

4. Except in conjunction with regurgitation through the auriculo-ventricular orifices, hypertrophy of the ventricles in many cases rather assists the circulation than promotes congestion.

In the *diagnosis* of chronic diseases of the heart, the first point to be determined is, whether the symptoms depend upon *organic* or *inorganic* causes. We must remember, also, that both sets of causes may operate at the same time. When organic changes are found to exist, the nature of such changes must be determined; whether the contractile power of the heart, or its valvular apparatus, or both, are affected; and, if the contractile power be affected, whether it is increased or diminished. For the diagnostic marks of these different states, we must refer to the work itself, extracting only the following signs of valvular derangements.

Aortic orifice. *Obstruction.*—Systolic murmur traced up the course of the aorta, sometimes very prolonged.

Regurgitation.—Diastolic murmur running up the aorta, visible arterial pulsations.

Mitral orifice. *Obstruction.*—Sometimes diastolic murmur at the apex of the heart and at the lower angle of the left scapula, not up the aorta—without visible arterial pulsations. Pulmonary obstruction.

Regurgitation.—Sometimes, but not often, systolic murmur, heard at the apex of the heart, and at the lower angle of the left scapula. Occasionally undulations between the second and third left ribs. Pulmonary obstruction.

Tricuspid orifice. *Regurgitation.*—Seldom any murmur. Venous pulsations of the neck. Obstruction of the general circulation.

Dr. B. remarks, that the great seat or amount of valvular derangement cannot always be determined, and that the chief endeavor of practical men will be to determine, if organic disease of the heart is present, whether its contractile power is increased or decreased, or whether either or both of the circulations which result from it are obstructed.

In hypertrophy of the ventricles, whether with or without dilatation, Dr. B. much prefers small bleedings, or cups and leeches to the precordial region, to free venesection recommended by Laennec, with sedatives and rest—indeed, abstraction of blood is seldom necessary at all, if the patient is kept free from mental and bodily disturbance. As a sedative, digitalis is the most powerful, and the tincture is preferable to the infusion, which acts more as a diuretic. But as this article is often uncertain, and sometimes produces dangerous effects, he prefers poppy, hyoscyamus, and conium. Local anodyne friction, particularly with belladonna liniment, or opium ointment, has seemed to him to afford more relief than any medicine administered internally. The douche, or regular cold sponging on the head, may be used to prevent the cerebral congestion, which is sometimes promoted by this state of the heart.

When the action of the heart is enfeebled, generous diet, with mental repose, and exercise which shall invigorate without fatiguing, is indicated, and sometimes the sesquichloride of iron, with hyoscyamus, is a valuable remedy.

When pulmonary obstruction is present, if there are both hypertrophy and disease of the valves of the left side of the heart, it is important to know whether the changes of the valves are such as give rise to mitral regurgitation or not, the existence of which must modify the treatment. Expectorants, with the occasional application of leeches or cups between the shoulders, and open blisters on the chest, constitute the leading means of treatment, with the addition of tonics, when the action of the heart is feeble.

When there are symptoms of general obstruction, diuretics must be added to the other means. Acupuncturation will often afford great relief for a time, but must be used with caution on account of the danger of gangrene.

We have next a chapter on circumscribed pleurisy, followed by one on chronic pleurisy, both illustrated by cases, the latter affection being one which is very apt to be overlooked, from the general symptoms being often so very slight at first, and from their great resemblance to those of phthisis pulmonalis in other cases.

The treatment in chronic pleurisy depends on the stage of the disease, and the state of the patient. In a great majority of the recent cases, mild iodine and mercurial frictions were employed, with opium, if there were any pain, and cream of tartar freely given as a drink. If this treatment failed, blisters were applied, and the surface dressed with mild mercurial ointment, and stronger diuretics given. Light, nutritious food was always ordered, and mineral tonics speedily resorted to.

In cases still more advanced, large blisters were applied at first, and strong mercurial frictions employed, and it was generally necessary to support the patient with beef-tea and tonics. The existence of fever did not contra-indicate these means, as it was rather increased than diminished by them.

Of acute *pneumonia*, our author recognises two forms, one of which is produced by congestion and inflammatory swelling of the vessels, and the other by deposition of lymph, the *serous* and the *sero-plastic;* to them he adds a third form, the *plastic*, in which lymph is deposited with little or no fluid, and this, he says, may be looked for in two varieties, in an *aggregated* and a *disseminated* form.

In the treatment of pneumonia, he prefers that by tartarized antimony, and says that, with certain modifications in individual cases, it is suitable to every form and stage of primary pneumonia.

The remaining sixty or seventy pages of the work are devoted to the subject of phthisis pulmonalis, and contain remarks on its nature, development and causes, for which we must refer to the work itself. There is also a chapter on the termination of this disease, with cases of its arrest and of restoration to health, after the formation and subsequent healing of a tubercular cavity in the lungs. We have also some interesting cases of acute phthisis, those cases in which life is destroyed within eight or nine weeks, by the development of tubercular and gray granulations in the lungs, without the formation of cavities. Such cases are rare, and our author has only seen twenty of them. Of these twenty, seven occurred between the ages of 6 and 10, two between 10 and 20, eight between 20 and 30, two between 30 and 40, and one about 70.

In the *treatment* of phthisis pulmonalis, Dr. B. thought proper to test *naphtha* and *cod-liver oil*, by trying each in one hundred cases, and from the experience thus furnished says, that naphtha has not been found either a specific remedy for phthisis, or one of any great value. Having found such beneficial, and as he says, unlooked-for results, from the use of cod-liver oil, he continues to use it, and to watch its effects, and adds that, although this article is not a specific remedy for phthisis, its exhibition has been found useful in certain cases when combined with a judicious system of regimen and diet. Dr. B. considers the grand principle on which to proceed in our endeavors to arrest the progress of phthisis pulmonalis to be the *union of tonic and sedative remedies.* This is a principle to which both the antiphlogistic and the expectant plans of treatment are opposed, which he thinks are both contra-indicated by the nature and known causes of the disease.

Our author's remarks on the *prevention* of the disease, are judicious and worthy of attention, as are also those on its removal and palliation, though but brief, as are also those on the management of the complications which occur during the course of the disease, to which he has added nothing new.

The work of Dr. B. truly deserves the title of "practical," which he has given it, and embodies the experience of one who has evidently studied his subject with care, and constitutes a valuable addition to our knowledge of the diseases of which it treats. H. D. B.

Art. IX.—*On the Causes and Treatment of Abortion and Sterility; being the Results of an Extended Inquiry into the Physiological and Morbid Condition of the Uterus, with Reference especially to Leucorrhœal Affections and the Diseases of Menstruation.* By James Whitehead, F. R. C. S., Surgeon to the Manchester and Salford Lying-in Hospital, 8vo. pp. 368. Philadelphia: Lea & Blanchard. 1848.

Perhaps there are no subjects more deserving of the attention of the general practitioner than those mentioned in the title of the work given above—no diseases, the treatment of which proves more unsatisfactory to both physician and patient.

A treatise embracing "the results of an extended inquiry" into this subject, if properly handled, should be received with mingled feelings of gratitude and pleasure. How far the work before us has these claims upon the profession, we proceed now to ascertain.

Mr. W. commences his work by an introduction of nine pages, in which he alludes to the progress made in the physiology of reproduction within the last few years—to the increased facilities offered for the study of organic diseases of the uterus, and to the descriptien and application of a new instrument which he has named the "*prolapsus tube*, or diseased uterus tube." Immediately after this comes his observations (chapter 1st,) on menstruation. In this chapter, the physiology of this most important function to the female economy is brought before the reader. It is upon this subject volumes have been written singularly crude and contradictory in their character. And it would be equally strange if there were not found views and doctrines that at the present time may be looked upon as scarcely (to say the least) settled. Passing over that portion of the chapter in which Mr. W. treats of the "*Signs of Puberty*," "*Periodicity of Menstruation*," and "*Quantity of the Blood thrown off at each Menstrual Period*," we come to that portion in which he treats of "*Properties of the Menstrual Blood.*" On this subject, much discussion has recently appeared. Many of our more modern physiologists believing that it differs in its sensible properties from healthy systemic blood in the fact of a slightly less quantity of fibrin, while others consider it completely deprived of fibrin, and that its want of coagulation depends upon this fact, or the presence of an acid. Mr. W., under this head does not commit himself—he however declaims, and that too, we think, with great justice, against the practice of placing so much confidence upon the chemical and microscopical analysis of portions of retained menses. Upon this subject he says:

> "The analyses hitherto published on the properties of the menstrual blood have evidently been made upon the discharge in is crude state, largely mixed with another organic product of a very different nature: they might indeed with equal propriety be considered as analysis of the vaginal mucus (which during the catamenial periods, is secreted in increased quantity,) combined with a certain proportion, sometimes more, sometimes less, of the *true* catamenial fluid."

Under the heading of the "*Nature of the Vaginal Mucus*," he remarks, "The mucus of the vagina in its normal state always exhibits acid properties; that of the uterus is constantly alkaline." It is well known that ordinary menstrual fluid does not coagulate. Our author believes this is owing to the presence of the acid found in the vaginal mucus. In relation to this, he says:

> "It is the mixture of this acid product with the true catamenial fluid in its transit outwards, which gives to the latter the peculiar properties by which it is generally said to be characterized."

This opinion is a slight modification of that of M. Retzius, who believed "that it was owing to the presence of phosphoric and lactic acids." The nature of the true menstrual blood he believes to differ from that discharged from the vagina. His mode of obtaining the fluid free from vaginal secretions is as follows:

> "For the purposes of examination, it may be procured by means of the speculum, care being taken always to remove, by the aid of a piece of lint or sponge held between the blades of a sponge-holder, all the secretion from about the *os* and *cervix uteri.* This must be done immediately after the instrument shall have been properly adjusted, and will be found necessary in order that the fluid may be free from admixture with that exuding from the surrounding surfaces."

When thus collected, it has been found to possess the following properties.

"1st. It is never so dark in color as ordinary menstrual blood, so called, nor always so florid as that of the arteries; its color, however, seems to vary slightly, being, at certain times, rather more florid than at others. This difference of shade which the fluid exhibits at the moment of its exudation, is attended by no corresponding change in its appearance subsequently, after being incorporated with the vaginal mucus; the effect of this latter product upon venous and arterial blood being very nearly the same. 2dly. Its consistence cannot be ascertained in every instance, as it does not always flow in a continued stream, unseparated. When collected in its *entire* state, it appears rather more viscid than the systemic blood. owing probably to its slow exudation. 3dly. When thus collected, it invariably coagulates, the separation of the clot from the serum being sufficiently distinct in three or four minutes: the smallness of the quantity may account for the short time required for the accomplishment of this change. 4thly. It sometimes passes off in a continued stream as pure blood. More frequently it is observed to escape from the *os uteri*, partly in form of a thin, colored serum. and partly in flattened clots, of the size of small orange-seeds, which, soon after their escape, become broken down and dissolved, as it were, in the vaginal mucus, escaping at the *ostium externum* in the usual uncoagulable fluid form. 5thly. It is invariably alkaline, quickly changing the turmeric paper to a reddish-brown color, and the litmus to a decided blue.

"Examined under the microscope it appears to be a very simple product, consisting chiefly of a number of blood corpuscles floating in a limpid, almost colorless fluid. The corpuscles are generally observed to be in greater abundance in this than in healthy systemic blood, and perhaps less clustered together in groups, and more equally distributed. There are often also a few white globules, larger in size than the blood discs, spherical, and nucleated, and a number of very minute granules similar to oil granules, highly refractive; and sometimes, but not always, here and there a scale of epithelium, which, there is little doubt, becomes entangled in the fluid as it passes off, being furnished probably by the mucous surface about the orifice of the uterus. At least such scales do not properly belong to the true menstrual fluid, as it is occasionally observed to be entirely free from them."

The nature of the ordinary menstrual blood, as collected from the vagina, was found to possess the following characteristics:

"1st. The acid nature of the fluid was unequivocal in every instance, but with varying degrees of intensity. 2dly. Its color was similar to that of healthy venous blood drawn from the smaller vessels, and never so florid as that of the arteries; it was always less viscid than either. 3dly. It did not coagulate. In some instances, however, when the discharge, from over-exertion, mental anxiety, or confinement to a heated atmosphere, became unusually profuse, clots were not unfrequently noticed among the secretion, and these had always an alkaline reaction.

"Under the microscope it presented a considerable number of blood corpuscles aggregated in linear or irregular groups, and floating in a pale, pinkish serum; these corpuscles, in the course of a few minutes after the removal of the fluid from the vaginal surface, appeared to diminish in number, some undergoing at the same time a change in their form and size: it occasionally contained a few lymph globules, and generally a number of small granular bodies like oil globules. It always contained, moreover, a great quantity of epithelium scales of different shapes and sizes."

The reader will easily see how different the physical properties of the two are, and the difference will no doubt account in part for the differences of opinion as given by writers. That the true menstrual fluid does contain fibrin he has no doubt, and that it is probable that the relative quantity of this constituent in the fluid under consideration, is not different from that which obtains in the circulating fluid in its healthy condition. Mr. W. sums up his remarks as follows:

> "The following observations and experiments furnish additional arguments in favor of the near approximation, if not the identity, in their leading characters, of the systemic and the *true* menstrual blood as it issues from the parts which secrete it; and tend strongly to prove, moreover, that the properties which are said to characterize *common* menstrual blood—namely, its want of power to clot, attributed to the absence of fibrin, its acid reaction, and its peculiar color and consistence—are altogether acquired, and variously modified, by admixture with the vaginal mucus after the fluid has escaped from the uterine vessels."
>
> "It appears then from what has now been stated, that the true menstrual blood, uncombined with any other product, is extremely like the circulating mass; consisting of the same elemental constituents, and observing the same habits under like circumstances. And, escaping from the uterus in the separated form before described, the small clots are immediately dissolved in the vaginal mucus, being thus enabled to pass off in an uninterrupted stream."

Whilst reading these remarks of our author, we were reminded of similar views put forth, nearly a quarter of a century since, by an American physician of no mean repute, and one, of whose claims to originality in this matter there can be no doubt.* On the subject of coagulation of the menstrual blood, he says: "We believe that menstrual blood does coagulate, and that when it does not, the fact is explained with facility without resorting to the aid of secretion." Again, "our own opinion is that natural menstruation is an active hemorrhage; that the discharge is blood, and of course that, like all other blood it will coagulate." We are exceedingly pleased to have this opportunity to show, that our British brethren, occasionally at least, are indebted to us for opinions which they claim for their own. We have as a profession in this country, been accused of having no views of our own, but if we mistake not, there are many similar instances not unlike the present, which would tell sadly for the want of (to say the least,) common courtesy in "our brethren across the great water," and which, we hope at some day, not far off, to see clearly presented to the profession.

In regard to those cases of reported menstruation during pregnancy, Mr. W., says:

> "I have met with a considerable number of instances of what appeared to be natural menstruation during pregnancy and the nursing period, wherein the crude fluid collected from the *ostium externum* was precisely similar, as

---

* Vide New-York Medical and Physical Journal, Vol. IV. 1825, p. 52. The article is entitled, "*Remarks on Menstruation: being an attempt to show that the generally-received doctrines, on this subject, are not only untrue, but inadequate to explain some of the most interesting phenomena connected with this subject.* By James R. Manly, M. D., President of the Medical Society of the State of New-York."

believed by the patient herself, and so far as I was able to ascertain by careful examination, to that discharged under normal circumstances. On examining these cases with the speculum during the existence of menstrual phenomena, the blood was invariably found issuing from diseased surfaces situated upon or about the *labia uteri*, none escaping from the interior of the organ."

The "source of the menstrual secretion," has long been a matter of dispute. Some have believed it to proceed from the mucous membrane of the vagina, others from the cervix uteri, and others still from the mucous membrane of the cavity of the uterus. Mr. W. is of the latter opinion, and to use his own expression, "has witnessed in numerous instances, the menstrual blood issue, from the *os uteri*, the *labia*, *cervix* and all the vaginal surface being perfectly normal, and furnishing no such product." Under this head our author takes up the subject of the periodic maturation, and discharge of ova, as connected with the phenomena of menstruation. From a careful review of this portion of his work, it would appear that he believes "that rupture of the ovisacs, and discharge of ova, are generally observed at this period; although the two are not necessarily co-existent," how Mr. W. can reconcile this with a previous expression of his and recorded facts, it is difficult to say, viz: "That the ovaries perform an important office in connection with menstruation, is evident from the fact that in cases where these organs are wanting, or where they have been removed by operation or destroyed by disease, the function is never discharged."

Now it is well ascertained that the specific function of the ovaries, is the maturation of the ova, this fact at the present time, few if any will dispute; that they are not discharged from the ovarium, until the period of puberty, the repeated and careful observations of many observers have fully settled. (We are fully aware that Dr. Ritchie, of Glasgow, believes to the contrary, but he stands alone in his belief, and as many think without one well-authenticated fact to confirm him.) This view of the case taken by our author as cited above is opposed to facts as revealed in repeated *post-mortem* examinations of persons dying in the act of menstruation. A large number of cases of this character have already been reported in American and foreign journals, in every case of which the rupture of an ovisac, and escape of an ova, has been distinctly authenticated. It is very difficult to conceive how an opinion can be more clearly supported by facts, than that which leads us to believe that the exciting cause of menstruation is the periodic maturation and discharge of ova from the ovarium. And that this function of the human female is accompanied in all instances by this phenomena.

Under this head Mr. W. treats of spurious menstruation, a condition which he believes to arise from ulceration or organic disease of the *os uteri*, vagina or vulva; he cites three cases illustrative of the importance of clear diagnosis, and the happy effects of appropriate treatment.

Chapter 2d is devoted to a consideration of those "conditions which particularly influence menstruation, at its commencement." In treating of the age of puberty, he gives a table which exhibits the respective ages at which menstruation commenced in four thousand females, including women of all classes indiscriminately met with in private and public practice. The average age of the first menstrual crisis was fifteen years and nearly seven months. Of the four thousand spoken of, 892 or 22.3, out of every hundred, accomplished the change of puberty with difficulty. The most favorable age, for the accomplishment of this function was between the ages of 15 and 16 years, whilst the periods most unfavorable, was previous to the first and after the second.

The influence of temperament in determining the character of diseased menstruation is spoken of. The best form of constitution he considers, that of the "*sanguine-bilious*, or the *bilious sanguine*." According to the predominance of one, or the other of these leading traits. The combination, or form spoken of, as the "*sanguine-lymphatic*, or the *lymphatic sanguine*," is the most unfavorable, and in England is frequently met with.

The "Scrofulous Diathesis," has much to do with determining the character of difficult menstruation. We shall pass over this part of the work and take up that which treats, "of employment as influencing the crisis of puberty." We cannot say that the facts which grow out of statistics in this matter are susceptible of any important practical application, in the treatment of the diseases of menstruation, but only in a prophylactic point of view. The conclusions of Mr. W. are drawn from observations made upon 4000 individuals, 2127 of whom were engaged in various kinds of manufacturing business, of whom 511 or 24.02 per cent. suffered from deranged menstruation. The remaining number 1873, were domestics and farm-servants, hawkers, seamstresses and shop-women, and included also 161 females, whose parents were in affluent circumstances, and who at the time were engaged in their educational pursuits. The subjoined table contains the results.

Of Females employed in Manufactories.

	Kind of Occupation.	No. of Cases.	Age of of Puberty.	No. of unfavorable cases.	Percentage of unfavorable cases.
Group 1	Spinners and piecers . .	520	15·58 yrs.	143	27·50
Group 2	Power-loom weavers . .	406	15·83 yrs.	104	25·61
Group 3	Carding-room hands . .	483	15·25 yrs.	97	20·08
Group 4	Warehouse hands, &c. . .	465	15·17 yrs.	117	25·16
Group 5	Fustian-cutters, hand-weavers, &c.	253	15·85 yrs.	50	19·76
	Of females engaged in home and out-door employments.				
Group 6	Domestic servants, &c. . .	1349	15·60 yrs.	249	18·45
Group 7	Seamstresses, &c. . . .	363	15·69 yrs.	74	20 38
Group 8	Educated ladies	161	14·41 yrs.	52	32·30

Comments upon this table we think unnecessary, as the facts show for themselves. We cannot refrain however, from saying that we think the numbers far too limited for a strict reliance to be placed upon the results. In noticing the last group in the table it will be seen that the per centage of unfavorable cases, is greatly increased over all the rest; it will also be seen that the average age when the first menstrual period, made its appearance was in this class nearly a year earlier. The evil results of the present mode of education has become proverbial in the profession, the utter neglect of almost all physical education for "the finer accomplishments of high life," are dearly paid for, as is clearly seen in all large cities. The high tax put upon the mental, at the expense of the physical powers is plainly manifest in the sallow complexion—the dull and lifeless eye—the relaxed system—in toto, the physical imbecility of fashionable life. The diseases of this class of persons are almost characteristic at this period of life. Speaking on this subject our author says,

> "The prevailing diseases of educated females at the age of puberty are pre-eminently those of an hysterical character. The affection does not so much precede, or retard menstruation; it usually accompanies the first efforts of the system to bring about the change, and continues to exist with great obstinacy, and often to an alarming degree, for a length of time after; being renewed or aggravated at each succeeding period, and simulating, from time to time, almost every disease, of whatever type, of which the female frame is susceptible. The approach of puberty is characterized, in such individuals, by an unwonted irritability of temper, fretfulness, dejection of spirits, singularity of manner, fits of laughing or crying for which no adequate cause can be assigned, a groundless dread of evil, disturbed and unrefreshing sleep; to which are added, palpitations, headache, nausea and loss of appetite, with great physical prostration. Symptoms of congestion supervene, with abdominal tumefaction, aching of the loins, and occasional swelling of the features or limbs. The first appearance of the menses is not unfrequently attended with an attack of hysteric convulsions, after which, should the discharge be furnished in sufficient quantity, the other symptoms soon undergo considerable modification, or altogether disappear.
>
> "The cause of this peculiar susceptibility to disease in the class of patients now under consideration, becomes a question of paramount importance; and is, without doubt, to be found in the faulty system of education pursued at boarding-schools. The mental faculties are called into premature activity, and tasked to a degree beyond their power of endurance, and the mind is crowded with a mass of matter under the fictitious denomination of accomplishments, which Nature never designed that it should entertain; while the proper training of the physical constitution is totally disregarded. Moreover, the indulgence of a propensity, irresistibly active at this period of life, to the reading of novels, romances, and works of a similarly vicious character, has likewise a very injurious tendency. Witness for instance, the violent and often dangerous paroxysms of hysteric emotions occasionally consequent upon the mere perusal of an affecting narrative, having probably no foundation save in overstrained analogy, or in fiction. These are agencies to which the unlettered are entire strangers, or which they experience but seldom and only to a very limited degree."

The beneficial influence of physical exertion, is evidently seen in marked improvement of physical development, in those who are addicted to such exercise. The due performance of all the functions of the animal frame, requires exercise, and particularly so in regard to the healthful performance of menstruation. "In no class of people, (says our author,) is the menstrual function so healthfully performed as in those necessitated to earn the means of subsistence by personal exertion, provided always that the employment be suitably adapted to the constitutional powers of the individual; while the converse of this is known to obtain with those in easy circumstances. Amongst farm-servants and others of the class, the period of puberty is seldom accompanied by any derangement of the general health ; but in the higher grades of society, it forms an era of the greatest anxiety, and is often the commencement of serious and irreparable organic mischief."

In large cities and manufacturing districts, there are thousands employed whose only means of support, is that which under the present arrangement tends unnecessarily, and that in great degree to derange health and destroy life. This state of things admits of a remedy, and it will be found as much within the power of those employed as the employers. Among those things which should be guarded against, says our author—

> "May be mentioned, late hours, frequenting crowded and heated apartments, irregularity in times of eating, reading or conversing upon subjects which have a tendency to over-excite the imagination, too close application to the study of music, drawing, needle-work, and other sedentary pursuits, and the neglect of the necessary bodily exercises, the omission of which for a time is inevitably followed by inaptitude for them, and consequent loss of health. A multitude of evils are clearly traceable to inattention to that wholesome discipline which all have the power, to some extent, of practising, and without which the integrity of the physical as well as of the moral constitution cannot long be sussained. A systematic arrangement of each day's business, whether as regards necessary labor, pleasurable relaxation, or devotional exercise; and also in matters of a more trifling nature, which are usually looked upon as too insignificant for consideration, but which, nevertheless, are made to absorb some portion of time for their performance; is of the highest importance, and would, if duly observed, contribute in no small degree, to the well-being of the individual."

On the subject "of climate as influencing the development of puberty," Mr. W. confines himself principally to the writings of others. Mr. Roberton's essays, in the Edinburgh Medical and Surgical Journal, and the London Medical Gazette, are freely drawn upon, and may be found to contain all that is found in this portion of the work.

Chapter III. is devoted to the diseases of menstruation, and is divided into "retention and suppression of the menses." Difficult, vicarious and metrorrhagic menstruation, under the first heading, a number of very interesting cases are related ; illustrative, however, of no new point in therapeutics or pathology. One of them, however, we will transcribe.

> "*Retarded Menstruation ; Hysterical Epilepsy ; Cure.*—M. P., of the nervous-lymphatic temperament, a domestic servant, had labored under a succession of catarrhal affections, during which she was troubled with difficulty of breathing, cough, and palpitation. On recovering from one of these attacks, she was seized with hysteric convulsions, which lasted two or three hours, and

left her greatly enfeebled. By the aid of some simple remedies she gradually recovered, and was able to resume her duties. After a few weeks, another and more violent attack of convulsions came on, the fits being repeated several times a day for three or four days in succession, and she again recovered. The attacks recurred, with increased severity, every three or four weeks, for ten months, when they recurred almost daily, and she was admitted a patient of the Lying-in-Hospital, in November, 1845. She was seventeen years of age, and had never menstruated. At the time of her admission, the fits were so sudden and frequent as to render it unsafe for her to go out unattended. In infancy and childhood her health was delicate, the right knee having for several years been the seat of "white swelling." Her present complaints, in addition to the convulsive affection, were severe pain of an intermittent character attacking one side of the head; pain along the spine and especially over the sacrum, and of the feet and ankles; irritable bladder; capricious appetite, flatulence with distension of the abdomen, and irregular bowels. The fits were always preceded for a few seconds by a sense of coldness which commenced about the hips and loins, and rapidly extended along the spine until it reached the head, when she suddenly fell down in a state of insensibility. The paroxysm over, she generally slept for a length of time, or if awake, was languid and drowsy for several hours.

"The treatment consisted in the repeated application of leeches to the hypogastrium, the hot hip-bath, and poultices to the abdomen; and in the administration of a mild saline aperient repeated at intervals of a few hours. The accession soon became less frequent and severe, and of shorter duration, and at the end of a week the general health appeared to be somewhat improved; but no vaginal discharge had appeared. She was then ordered to take three grains of the iodide of iron, combined with one of quinine, every eight hours, and an aloetic aperient every third morning. After pursuing this plan of treatment a fortnight, she was greatly improved in health and strength, having had no recurrence of the fits during several days. At this period, from experiencing severe oppression and sense of fulness about the abdomen and loins, the hot hip-bath and poultices were again resumed; these had been only twice used when the menses appeared for the first time, and continued in sufficient quantity from three to four days. She has since menstruated regularly."

The 2d division, suppression of the menses, is one of great interest, not only in its bearings on pathology, but also that of legal medicine, many and trying have been the circumstances in which physicians have been placed by this state of things. Its general causes are well understood, but there are times when a knowledge of all the causes leading to such a state cannot be ascertained, nor even so much of them as to lead to even an approximation to the truth without going farther than in general the physician is permitted to go. Mr. W. cites a case which, in relation to those points of doubt, and its bearings upon pathology, is so clear, we cannot refrain from giving entire.

"*Suppressed Menstruation; Apoplexy; Congestion of the Cerebral Veins and Sinuses.*—Miss F. J., a young woman, nineteen years of age, of the sanguine-lymphatic temperament, in respectable circumstances, had enjoyed excellent health through life, until within a few days of her death. She began to menstruate at the age of fifteen years and a quarter, without an unfavorable symptom; and the function continued to be regularly discharged every twenty-seven or twenty-eight days, (reckoning always from the day of commencement of one period to that of the next following:) the discharge occupied from four to five days at each return. On Thursday, the 25th of February, 1847, death deprived her of an aged and affectionate relative, with whom she had resided, as an adopted child, since she was an infant, and from whom she received a considerable bequeathment of property. On the day of this occurrence, the menses should have appeared, according to previous custom; she experienced the usual premonitory symptoms of the functional effort, but the discharge did not appear. This failure was attributed to the fatigue and anxiety which she had endured for several days previously. Two days afterwards, (Saturday,) other relatives arrived at the house of the deceased, claiming the privileges of a nearer kindredship than that of the legatee; and during an altercation respecting the disposition of deceased's possessions, the girl was seized with violent palpitation, ending in syncope, from which, however, she shortly recovered. In the evening of the same day, she complained of headache, lassitude, and general *malaise;* for the relief of which, and with a view to encourage the suspended menstrual function, the hot foot-bath and a dose of medicine were employed. On the following day, (Sunday,) she experienced violent pain of the head and loins, with a sense of distension and oppression about the lower region of the abdomen: the menses were still absent. During the ensuing night, she was restless and feverish; and, about three hours after midnight, was seized with violent hysteric convulsions, accompanied with a sense of choking. This first attack was said to have lasted several minutes, and to have left her extremely languid, but sensible. After a short interval the convulsions returned with increased severity, continuing to recur in quick succession during the rest of the night; and in a few hours, the patient was found to be totally unconscious, even during the intervals of quiescence from the spasmodic affection.

"I first saw her nine hours after the seizure, and found her quite insensible, and incapable of being roused. The features were tranquil and of a leaden paleness; the eye was closed and free from vascular turgescence, the pupil widely dilated; the teeth were firmly clenched, and the tongue partially protruded between them; the breathing was noisy, but not hurried or stertorous; the pulse, beating seventy-two times in the minute, was full, but not free. Whilst prosecuting my inquiries, a violent paroxysm of tetanic convulsions came on, implicating, principally, the muscles of the abdomen, and, less powerfully, those of the thighs, legs, and arms; but producing scarcely a perceptible change upon the expression of the face. During the fit, the breathing became somewhat accelerated and more noisy: and a little froth began to be blown from the mouth as the contractions abated. The abdominal muscles in the supra-pubal region were gathered into the form of a circumscribed tumor the size of a child's head, which became a little, although but very slightly diminished, by evacuation of the bladder with the catheter: this circumstance created a momentary suspicion of the existence of pregnancy. Examination *per vaginum*, however, immediately cleared up the doubt; the os uteri being small and linear; its lips smooth and even; and the whole organ light, loose, and of the unimpregnated size. Moreover, the tumor in question, losing its circumscribed character as the spasm subsided, was soon lost in a diffuse fulness of the whole hypogastric region, in which state the parts remained during the rest of the quiescent interval. The treatment consisted in free abstraction of blood from the arm; sinapisms to the abdomen and the calves of the legs, (to which parts she was said to have referred as being the seat of uneasiness and pain during several days previously,) evacuation of the bowels by enemata; and vesication of the nape of the neck. No remedy could be administered by the mouth, as the power of swallowing was entirely suspended. The bleeding appeared to produce some temporary mitigation of the convulsive movements, but did not at all diminish the frequency of the paroxysms; and there was not a gleam of consciousness either then or afterwards. The pupil was perfectly insensible to light, and dilated to a ring; the breathing became gradually more labored and stertorous; froth issued from the mouth, and the convulsions ceased two hours before the moment of dissolution. In twenty-four hours from the commencement of her illness she died.

"On *post-mortem* inspection, thirty hours after death, the brain, including the cerebellum and medulla oblongata, was perfectly healthy. It was not more than usually vascular; and there was no effusion whatever, either of blood or serum into its substance, or within the ventricles, or in any part of the cranial cavity. There was not a trace of meningeal inflammation. All the large sinuses, however, and the veins which terminate in them, were distended to their utmost limit. The two lateral, the torcular Herophili, the straight, and the longitudinal sinuses were gorged with black, firmly-coagulated blood; and the veins terminating in the superior longitudinal sinus were similarly distended and occupied, lying in the inter-convolutional *sulci* like tortuous earthworms, equalling in their capacity the calibre of an ordinary writing quill.

"The thoracic and abdominal organs were all healthy.

"The *os uteri* was about a third of an inch long, and quite closed; the labia were of the ordinary healthy dimensions, and free from congestion. The body of the uterus was turgid; its right half, both anteriorly and posteriorly, was deeply injected with blood, offering a striking contrast with the opposite half of the organ, which was pale, with the exception of a small spot, here and there, of vascular turgescence. The cavity of the uterus was more dilated than it is usually observed to be when perfectly quiescent. Its mucous lining presented a most beautiful arrangement of the vascular capillaries, which were finely injected with what might have been a slightly-colored serum, giving the most delicate rose-tint that can well be conceived.

"The whole plexus of vessels approaching the uterus and Fallopian tube, enclosed between the folds of the broad ligament, were, on the side corresponding to the turgid moiety of the uterus before-noticed, distended with red blood; the great mass of them were observed to take a course parallel to the Fallopian tube, but were connected together by innumerable transverse and oblique branches; the whole forming a beautiful crimson band of net-work about an inch and a quarter in width, extending between the *ovarium* and the *uterus*. The Fallopian tube and *corpus fimbriatum* on the same side were turgid, of a deep crimson color, and appeared as if consisting entirely of an aggregation of injected capillaries. On the left side the vascular turgescence was less considerable, being confined principally to the outer extremity of the Fallopian tube, and adjacent parts.

"The ovaries were greatly enlarged. They were both covered with cicatrices, beneath some of which were remains of yellow bodies, in different stages of decadence. The left presented, at its upper part, a Graaffian vesicle, which appeared to have arrived at a stage of development beyond what is generally considered maturity. It was elevated to at least five-sixths of its entire dimension above the surface of the ovary in which it was imbedded; and through its beautiful transparent walls, the yellow germinal vesicle could be distinctly seen. Trunks of vessels of extreme minuteness, emerging from the surrounding *stroma*, mounted upwards upon the walls of this vesicle, subdividing into a multitude of smaller ramifications, which could be seen only by the aid of a powerful magnifier. A few of the loops constituting the *corpus fimbriatum* were adherent to the surface of the ovary close upon the base of the ripe Graaffian vesicle, as if designed to insure the unerring insertion of the one within the other at the moment when the organic act of ovular separation was intended to be accomplished. It is more than probable, that temporary adhesion of the floating *infundibulum* of the Fallopian canal to the vicinity of each matured vesicle, previous to its evacuation, takes place on every such occasion; the bond of union becoming dissolved so soon as the purpose shall have been fulfilled.

"The above case illustrates a form of disease consequent upon hysteric disturbance, which occurs much more frequently than has ever yet been acknowledged. Seldom does it happen, it is true, that a fatal termination is so speedily consummated, although such cases are by no means uncommon; and in numerous instances, the issue, however protracted it may be, is nevertheless equally certain and disastrous."*

The frequent occurrence of organic mischief which has its foundation in this derangement of the functions of menstruation, is generally recognised, and yet not unfrequently cases do occur, in which important errors in diagnosis are made. The anomalous affections of the heart, when this state of things has existed for a length of time, and then partially restored, may be cited as an instance. Our author believes, "that a greater amount of irreparable mischief has its origin in this class of affections in the adult female, than in derangement of any other system of organs, not excepting those of digestion and assimilation."

The suppression of this function frequently leads to congestion, by which "inflammation of the lungs, the liver, the bowels, the bladder, the kidneys, or of the fibrous tissues, is frequently originated; and a similar condition of the nervous centres, induced by the same cause, is frequently the proximate precursor of convulsive affections, epilepsy, paralysis, or of sudden death; together with a host of morbid manifestations vaguely referred to spinal irritation." The case just cited is one which confirms in part those views, and others might be deduced from the work if space would permit.

Difficult menstruation is next spoken of. Much important light has within a few years past, been thrown upon this department of the pathology of menstruation, by the use of the speculum. The frequent occurrence of organic disease of the *os uteri*, is now admitted as one of the causes of this affection, a case is cited illustrative of it. Nothing novel in the therapeutics of this affection, is elicited from the perusal of this division. And we regret to see that some of the most clearly established principles of practice are omitted or not mentioned. Such, for instance, as the treatment of this distressing affection (in cases of stricture or coarctation of the *os*,) proposed by Dr. Mackintosh, viz: the use of the bougie, a practice admitting of successful application in a vast number of cases.

We pass over the divisions which treat of vicarious and metrorrhagic menstruation, and come to Chapter IV., which treats of that most critical period in the life of woman the "last menstrual crisis." Mr. W. commences this chapter by the recitation of a case, where the patient, aged 75 years, commenced menstruating, at the age of *thirteen*, and continued to do so excepting during the first two months of nursing until the period when the notes of the case were taken. She was the mother of fifteen children, born at thirteen labors. During the period of gestation, the menstrual function was regularly performed and to all appearances in the usual quantity and quality. Another case is also cited, when the patient continued to menstruate regularly until her fifty-fifth year, when it ceased, and returned again at the age of ninety, and continued for thirteen months, until death, regular in period, quantity and quality.

---

* "The morbid specimens, illustrative of the preceding case, were exhibited before the members of the Manchester Pathological Society, at their meeting on the 4th of March, 1847; and the like opinion was expressed, in reference to the frequent fatality of menstrual metastasis to the brain and spinal marrow, by the eminent and learned Dr. Knox, of Edinburgh, who was present on the occasion in question, and who offered some very interesting observations upon this class of diseases."

A third case is also related where the patient, aged sixty-six, has menstruated regularly except during the periods of gestation and nursing. Mr. W., then proceeds to enumerate some of the causes which tend to influence the precise period and character of this change, a table of 69 cases is given containing the per cent. of favorable and unfavorable cases, with their respective ages, &c. From this it appears—

> "That a greater liability to disease exists in those who have the change protracted beyond the average age of cessation, than in those instances wherein it happens at an earlier period: the number of unfavorable occurrences being, for the former, one in three; for the latter, one in every four individuals. The number of pregnancies for each respectively, is greater in the former than the latter; but the abortions fewer; and their age at puberty is about six months later, and on the average less favorably accomplished."

He then proceeds to speak of the "Diseases of the last Menstrual Crisis." It is at this period that some of the most inveterate diseases, frequently of a malignant character, commence, and even in the most favorable cases, more or less trouble is experienced; for the purposes of practical convenience, he arranges the diseases of this period under three distinct heads.

> "Each distinguishable from the other by the character of the discharge with which, early or late, it is almost invariably accompanied; and also, by the kind and degree of suffering which it occasions in the organ immediately implicated, and the sympathetic disturbances simultaneously awakened in remote parts of the body. The *first*, and most common of these affections, is characterized by a muco-purulent discharge from the vagina, generally denominated *leucorrhœa*, or the whites; but which differs from simple leucorrhœa in several important particulars; the *second*, is often accompanied by vaginal hemorrhage, the discharge differing, both as to its properties and in its source, from the menstrual product; the *third* form is characterized by a watery, sanious, serous, or ichorous discharge, which is sometimes mixed with blood, sometimes with pus, mucus, or albumen-like shreds, and occasionally with small portions of fleshy matter, the product of the organic change upon which it depends. It generally emits an offensive odor."

Each of these three divisions is illustrated by cases, one from each of which we select. The following case illustrates the course and treatment of the first.

> "*Purulent leucorrhœa after cessation of the Menses; Disease of the lower part of the Uterus; Cure.*—Mrs. C. S., fifty-five years of age, of the lymphatic temperament, native of South Cheshire, consulted me in August, 1844, for disordered digestion, "inward weakness," and the whites, under which symptoms she had for several years been a sufferer. It was stated that she had borne eleven children at the full term of utero-gestation, and subsequently, two abortions, each in the fourth month of the process, and for which no adequate cause could be assigned. Her last abortion, which occurred in her forty-seventh year, was attended, at the time of delivery, by profuse uterine hemorrhage, which was continued in a moderate degree six or seven days; when an offensive, ichorous discharge came on, in

quantity nearly equalling what the *lochia* should be under favorable circumstances. Three weeks after delivery, the menses appeared, and were afterwards repeated at regular periods ; the offensive secretion occupying the whole of each interval. In her forty-ninth year, the menses began to be irregular ; sometimes continuing ten, twelve, and fourteen days, and sometimes being delayed seven or eight weeks ; the light-colored discharge, which at this time had assumed the appearance of common pus, devoid of fetidity, occupying still the intermediate period. At fifty-two years of age, the menses finally ceased, but the leucorrhœal excretion continued undiminished, and for a length of time afterwards was observed to become periodically augmented, on which occasion it was usually attended with languor and febrile irritation, aching of the loins, distention of the abdomen, and aggravation of the dyspeptic symptoms, to which latter affection all her other sufferings were then, and always had been, attributed.

"At the time of her application for treatment, her prevailing complaints were : lassitude, loss of appetite, pain of the stomach, and all the usual concomitants of aggravated dyspepsia ; and a copious vaginal discharge of yellow matter, communicating deep stains to the linen, which were difficult of removal by washing. Suspecting the existence of uterine disease, I explained my impressions in reference thereto, and suggested the desirableness of an examination, which was not then permitted. She was ordered, however, to use, night and morning, an injection of solution of sulphate of zinc, combined with wine of opium ; to take a mild alerative and anodyne* dose at bed-time, and a draught of decoction of *cinchona* with extract of *taraxacum*, rendered slightly aperient by the addition of sulphate of magnesia,† twice daily. This treatment was persisted in about a fortnight, when she returned to the country, not perfectly well, but greatly improved.

"In March, 1846, Mrs. C. S. again applied for relief, the vaginal discharge, with its attendant inconveniences, having returned ; although her sufferings, on the whole, were less severe than they had been formerly. She also complained, at this period, of piles, an affection under which she had not previously labored. Having, as she stated, more carefully attended to the invasion of the symptoms during this second accession, she strongly expressed her belief in the correctness of the opinion formerly given, in reference to the affection of the womb being the principal seat of mischief, and not the digestive organs as was before alleged : the leucorrhœa, with its attendant sympathetic manifestations, having existed several weeks before the stomach began materially to suffer. A specular examination being now made, the *cervix uteri* was found enlarged and unusually hard ; the anterior *labium* and a small portion of the posterior, presented granulating surfaces, and a deep ulcerated fissure occupied the right *commissura labiorum.* The whole was covered by a thick, yellowish secretion of purulent appearance, exhibiting alkalescent properties ; and a sanious discharge exuded from the orifice.

"The treatment consisted in the administration of similar medicines to those employed on the previous occasion, with addition of the application of nitrate of silver to the ulcerated surfaces. This remedy, which was used in form of a *strong solution,*‡ was five times repeated, at intervals of five or six days, when the discharge ceased, and the parts were quite healed. A slight degree of ptyalism was manifest on the twelfth day of the treatment, on which account the pills were discontinued. She returned to the country, apparently well, at the end of five weeks; but was recommended to continue taking the draught some time longer, and to use, occasionally, the injection of *liquor plumbi* combined with an opiate."

---

* ℞. Camphoræ, gr. v.
Pil. Hydrarg. gr. iv.
Pulv. Opii, gr. j.
Misce, fiat, pl. iij. pro dosi.

† ℞. Decoct. Cinchon. ℥iss.
Extract. Taraxaci, gr. xv.
Magn. Sulph. ʒj.
Misce, fiat haustus.

‡ ℞. Argenti Nitratis, ʒj.
Aquæ Destillatæ, ʒiij.
Misce, fiat solutio.

The following may serve to illustrate the second division.

"*Uterine Hemorrhage after the Cessation of the Menses; Purulent Leucorrhœa; Varicose Ulcer of the posterior Labium Uteri; Cure.*—A poor woman, named Ann Carr, fifty years, of age, of the bilious temperament, was admitted a patient of the Lying-in-Hospital, on the 10th of April, 1846, for the treatment of leucorrhœa, an affection under which she had for several years been a sufferer. She stated that she had had fourteen pregnancies, the first six and the fourteenth of which terminated favorably at the full term of utero-gestation; the seven intermediate pregnancies were abortions,—four of which happened in the sixth or seventh months of the term, and were still births; and three before the end of the fourth month. When near the completion of her sixth pregnancy, she contracted a gonorrhœa from her husband, of which she thinks she was never properly cured: to the effects of this she attributes her subsequent miscarriages. The offspring of this pregnancy had purulent *ophthalmia*, and died emaciated. She was somewhat improved in health at the time of her last pregnancy; but that child was puny, and died in infancy. After her last nursing period, in her forty-second year, she menstruated regularly until the age of forty-eight, when the menses finally ceased; but the whites, which had existed ever since the first appearance of the discharge in the form of gonorrhœa, became at this period still more abundant.

"Five months after the above event, the patient being in very infirm health, with abdominal enlargement, creating a belief in the existence of a dropsy, a profuse uterine hemorrhage came on, which passed away in clots of small size. This continued in a moderated degree, without ceasing, more than four months, when it was replaced by the leucorrhœal discharge, in its accustomed form. Her linen, which she exhibited, was covered with thick, yellow stains, and the recent secretion was strongly alkalescent. She complained of a fixed, deep-seated pain of the right hypogastrium, near the groin; severe and constant aching of the right hip and thigh, and across the sacrum; frequent desire to void the urine, with sense of constriction in the region of the bladder; disordered digestion, and irregular bowels; attacks of alternate chills and flushes of heat; and great physical prostration.

"Examined with the speculum, the *cervix uteri* was found unusually tumid, and was traversed by a number of prominent venous branches of different sizes; the anterior *labium* was hard, hypertrophied, and excoriated; the posterior *labium* was also enlarged, and completely occupied by a flabby, purple-looking sore with irregular surface, from which a small quantity of blood oozed out during the examination.

"The treatment consisted in the application of leeches to the hypogastrium; and subsequently in the use of the solid nitrate of silver to the ulcer and to the whole of the lower part of the uterus. She also took, night and morning, a grain of calomel combined with half a grain of opium, until the mouth became slightly affected; and a dose of the compound decoction of sarsaparilla containing three grains of iodide of potassium, thrice daily, for six weeks. The nitrate of silver application was four or five times repeated, at intervals of a week; and after relinquishing the sarsaparilla, she was ordered to take small doses of quinine and aloes, for several weeks more. The improvement progressed favorably from the first. She was discharged cured, on the 15th of July, three months after her admission; but appeared sufficiently recovered several weeks earlier."

The following case which he quotes from the published reports of the Manchester Pathological Society may be given as a type of the third class of affections.

"*Disease of the cervix uteri of the cauliflower variety; Cerebriform cancer of ovarium; Malignant degeneration of Fallopian tube and of cellular structure of the pelvis.*—The subject of this case was a lady in respectable circumstances, of the sanguine-bilious temperament, who had enjoyed a tolerably comfortable state of health until within a year of her death, which occurred in Oct., 1846, at fifty-six years of age. Her seventh and last child was born at the age of thirty-three, when she became a widow. She ceased to menstruate at the age of forty-seven, without marked inconvenience; excepting a slight leucorrhœal discharge which had occasionally appeared during the preceding twelve months, having commenced at a time when the menses began to be irregular, and gradually increased in quantity as the latter waned.

"After the final cessation of the menses, the leucorrhœa was repeated, or augmented, periodically, at times corresponding to the natural monthly periods; but after some months it became irregular, both in the times of its recurrence and the quantity and appearance of the secretion. In her forty-ninth year she had repeated attacks of bleeding piles, during the existence of which the vaginal discharge ceased, or was greatly diminished, but re-appeared in its usual form as the bleeding from the hœmorrhoidal vessels subsided. From this period she continued to have, at irregular intervals of one to three months, alternate rectal and vaginal discharges, attended with a sense of weight at the lower part of the abdomen, and with lumbar and hypogastric pains, until the end of her fifty-fifth year, when symptoms of the specific affection set in, and the hœmorrhoidal affection did not afterwards appear.

"Decided indications of the malignant change were first noticed eleven months before death. The patient, having for several days experienced an unusual degree of languor, and a sense of fulness and oppression of the abdomen, was seized with uterine hemorrhage whilst walking in the street. She was not alarmed, however, by this event, believing it in reality to be a return of menstruation, a circumstance which she had heard was not uncommonly witnessed late in life. The bleeding was suffered to continue nine weeks without the adoption of any effective measures for its relief; and it was several weeks more before the patient would consent to the necessary vaginal investigation. At this period, the discharge, which for several weeks previously had greatly increased in quantity, and had undergone a notable change in its appearance, was so considerable as to require five or six changes of linen during twenty-four hours: it was a lightish brown, watery fluid, and peculiarly offensive. The functions of the bladder and rectum were also materially interfered with.

"Upon tactile examination, the pelvis was found occupied by a tumor of irregularly spherical form, with lobulated surface, of the consistence of soft cartilage, and elastic. It was firmly impacted in the pelvis, occupying the whole cavity; but by persevering efforts the finger could be insinuated between it and the *vagina* so as to reach the *cervix uteri*, which was slightly thickened, but its surface was smooth and even. The tumor was insensible to pressure, but the vaginal membrane was highly injected and irritable.

"By the aid of the *speculum*, the diseased mass, its surface being cleared of secreted fluid, appeared of a uniformly reddish-gray, or salmon color. Its structure was extremely brittle, small portions, the size of a pea or bean, being occasionally detached during examination. These fragments were semi-transparent, of a light ash color, and were soon reduced by pressure between the finger and thumb, into a thin, glairy pulp.

"The treatment, which was commenced seven months before death, consisted in the employment of mild tonic and alterative medicines: due attention being always directed to the condition of the urinary and alvine functions.

The local applications were the solid nitrate of silver freely repeated every six or seven days, with injections of chloride of lime, and of water, in the intervals. The solution of nitrate of mercury in strong nitric acid, was also several times tried; but the former remedy appeared to be decidedly preferable. After five or six applications, the symptoms were greatly relieved; the discharge was remarkably diminished, the tumor decreased in size, so as no longer to interfere with the action of the bladder or of the rectum; the hypogastric fulness and aching of the loins and hips were much less distressing, and the general health was decidedly improved; so that at the end of three months, very confident hopes were entertained of a successful issue. In the fifth month of the treatment, the tumor became reduced to the size of a small orange, having an excavated centre, with elevated, irregular edges. The discharge was no longer watery or sanious, but thick, yellowish, and purulent, and furnished in very small quantity; still emitting, however, an offensive odor. At this stage of the complaint, the patient began to experience severe and constantly increasing pain of the sacrum, hip, crest of the ilium, anterior part of the thigh, with tumefaction of the abdomen, and an anasarcous state of the whole limb; all on the left side of the body. The cause of these phenomena, which became daily aggravated, was satisfactorily revealed by the *post-mortem* appearances, to be presently described.

"The *speculum*, the employment of which was so strenuously objected to at the onset, became the medium of administering, in the most gratifying manner, to the patient's comfort during the latter months of her life. The sore, by its aid, being fully brought within view, the whole of the accumulated, offensive secretion could be effectually removed, and the surface treated with a soothing antiseptic agent, which rendered her comparatively comfortable for a length of time afterwards. These applications, which were composed of chloride of lime combined with *opium*, sometimes with extract of *conium* or of *belladonna*, became necessary every second or third day. On two or three occasions, when the operation was too long delayed, she experienced an attack of shivering, with increased pain of the *sacrum* and *hypogastrium*, vomiting, headache, and hectic fever. Such accessions were frequently repeated during the last few weeks of her life, and were always found to be most severe when a portion of the ulcerated surface had become changed, (which was several times observed,) into a black, powdery, melanotic matter of a putrid and extremely offensive odor. This deposition could always be completely removed by means of lint held between the blades of a sponge-holder; and it was, doubtless, owing to the timely removal of this putrid substance, and the application of powerful antiseptic remedies, that life was prolonged and rendered less painful: the melanotic change being thus prevented from implicating the deeper structures of the organ.

"On inspection of the body twenty-four hours after death, the *fundus* and body of the *uterus* were found of the ordinary unimpregnated size, and apparently free from disease; the *cervix* was thickened; and the *labia* were large, and expanded, presenting an uneven, ulcerated surface of malignant appearance, studded, here and there, with nodules of the original formation in form of granulations of different sizes, the remains of the tumor first noticed. The sub-texture of the adjoining walls of the vagina was loaded with hard, granular fat, some portions of which had undergone the malignant degenerescence. The whole of this adipose tissue was very vascular, the arteries especially being large and distinct; their coats thickened, and of cartilaginous hardness.

"The left *ovarium* was the size of a small walnut, very hard and lobulated; and from one of these lobules sprang out a tumor which had acquired the dimensions of a fœtal head of seven months' growth. This tumor, which had a thick shining coat, consisted of a fine granular matter, of the consistence and appearance of the white matter of the brain. It had insinuated itself between the common iliac vessels which were embedded in its substance posteriorly, and the *psoæ* muscles which were stretched along its anterior and outer aspect, having the lumbar plexus and anterior crural nerves running upon their surface. It was traversed by a great number of vessels with thickened coats, of considerable size; and some apparently enlarged nervous filaments were also traceable upon it.

"The corresponding Fallopian tube was enormously distended in its whole length, the diameter of its caliber being about three-quarters of an inch. This very unusual product of disease, from the convoluted arrangement of the viscus, and the adhesion of its external sides to each other in places where they had fallen into contact, together with its morbid attachment to the adjacent surface of the ovarian tumor, gave it, at first sight, an appearance as if forming an integral part of this body; but the adhesions being broken down, and the convolutions of the tube unravelled, it could be elongated into a soft cylinder having the thickness of a man's thumb, and of a pearly whiteness. Its fimbriated extremity was soft and pulpy, and looked like the surface of a granulating ulcer. The two outer thirds of the tube were filled with a soft cerebriform cancerous deposit;* its inner third contained a fluid resembling pus, which gushed out upon an opening being accidently made through its parietes. A number of enlarged vessels and filaments of nerves were seen joining the tube near its fimbriated extremity.

"Changes of a precisely similar character, in the insipient stage, were observed in the organs of the opposite side. The right *ovarium* had the dimensions of an ordinary-sized bean, and was very distinctly lobulated. One of its lobules, larger than the rest, was indurated; and to this the *corpus fimbriatum* of the corresponding Fallopian tube was morbidly adherent. The two outer thirds of the tube itself were dilated to at least ten times the ordinary dimensions; its walls were thickened and highly vascular.

"There can be little doubt, upon carefully reviewing the history of the preceding case, that the disease had its origin in the lower part of the *uterus*, and that it was subsequently conveyed to the Fallopian tubes, and thence to the ovaries, which were the last to become affected. For, looking at the relative state of advancement of the morbid growth in the Fallopian tube and corresponding ovary on the right side where the change appears to be in the incipient stage, the disease bears evidence of having had an earlier date in the former than in the latter; and the same may reasonably be inferred in reference to the primary stages of the affection on the left side."

We have quoted these cases, although lengthy, for the purpose of giving the reader the opportunity of hearing Mr. W. speak for himself. These cases are exceedingly interesting in their history, pathology and treatment—but why he should treat so minutely of the organic lesions of the uterus, and neglect to speak of those equally perplexing in their character, (we mean those of a nervous character similating organic disease of other organs,) we cannot well conceive. Certainly they are cases of great interest to the general practitioner, and not unfrequently tax his best judgment in forming a correct diagnosis. It is this class of affections also which lays the foundation for organic mischief. This is clearly proven by the frequent occurrence of organic diseases of the kidneys, heart and brain, which present themselves within a short period after this change is effected. We should have been much pleased to have seen this subject handled in the same free and impressive manner that the diseases of the uterus are.

---

* "There can be no doubt about the malignant nature of the disease in this case: the fact having been satisfactorily substantiated by the testimony of my friend Dr. Renaud, who submitted several portions of the morbid product to careful microscopical examination.

Chapter V. is devoted to the consideration of the "Signs of Pregnancy." The first part of this chapter is devoted to a few general observations on the importance of a thorough understanding of the subject; in relation to diagnosis, a number of cases are cited where gross mistakes were made—one when the patient was pronounced not pregnant by a number of practitioners; her symptoms were referred to dropsy, and the operation of tapping was resorted to with the escape of about five pints of fluid, two hours after which, she was delivered of a full grown living child. From the history of this case, there is but little doubt but that the uterus was entered, and the liquor amnii drawn off. On the "Structure of the Uterus," he adopts the views of Dr. R. Lee. The subjects of "Peculiarities of the Unimpregnated Uterus," "Organic Changes after Conception," "Size and Form of the Uterus," "Position of the Uterus," "Quickening," and several others of minor importance we pass over, and come to "Suppression of the Menses." Our author in treating of this subject, gives the notes of seven cases occurring in his own practice, where exceptions to the general rule existed. One of which we will quote.

> "Mrs. L., a delicate, lymphatic-looking woman, age twenty-nine years, is mother of one child, born four years after marriage, and which is now three and a half years old. This person, who has had no other pregnancy, began to menstruate, with difficulty, at the age of eighteen, after having had leucorrhœa, which was periodically augmented, for more than half a year previously. This morbid product was a white glairy mucus, before marriage; but since, it has always been thick and yellow, and decidedly purulent. Menstruation, however, has been regularly performed since its commencement without a single interruption; being continued in its usual form during the whole period of pregnancy and lactation, and she was unaware of the existence of pregnancy, believing herself to be dropsical, until within a few weeks of her delivery. She has long been in delicate health."

All of these cases and in addition eight more were submitted to a speculum examination, the results of which we will give in Mr. W.'s own words.

> "The discharge when moderate in quantity, was similar to ordinary menstrual blood, both in color, consistence, and in its chemical reaction: it differed materially, however, in different persons, and in the same person at different times, with respect, especially, to the relative intensity of its alkaline properties. When in considerable abundance, small clots were sometimes thrown off, as happens, occasionally, in cases of menorrhagia. All the patients had leucorrhœa, in greater or less degree, accompanied by the train of sympathetic disturbances usually attendant upon these affections. This product communicated yellowish stains to the linen upon which it was deposited, and exhibited alkaline properties; evidences of a conclusive kind as to its purulent character.
>
> "On examination with the speculum, inflammation or ulceration of one or both labia, or of the cervix uteri, complicated in some instances, with warty excrescences growing from the cervix, or from some part of the vaginal membrane, vaginitis, &c. was met with in every case, without an exception. Fif-

teen cases were submitted to this kind of examination at the time the blood was flowing."

Thus it will appear that the alleged cases of menstruation during pregnancy are not the proper performance of this function, but the result of organic lesions of the uterus or vagina. The bearings of these facts ought to be recognized in medico-legal science. Several other subjects are treated of under this chapter, such as the condition of the urine, sensorial manifestations, death of the fœtus in utero, &c., which we are compelled to pass over in order to give room for a notice of his observations on abortion. This subject is embraced in chapters vi., vii., viii. and ix. Chapter vi. is devoted to the statistics of abortion. A number of tables are given relating to this subject in various phases, from which it appears that more than thirty-seven out of every one hundred experience abortion before the period of thirty years. It is generally believed that first pregnancies have more frequently a premature termination than those which come after. Mr. W. does not coincide with this opinion, from his observations he is inclined to believe that the third and fourth pregnancies, and perhaps the last, which occur near the termination of the fruitful period, are most frequently unsuccessful.

Chapter vii., viii. and ix. treats of the causes of abortion. In the first, those causes which appear to be accidental and in part referred to sources independent of organic lesion of the uterus are mentioned. Of 1222 abortions, the following causes were said to give rise to them :

"'Inward weakness,' impaired state of the health generally, and acute disease	911
Accidents, mental perturbations, &c.	222
No assignable cause	90
	1222"

"Placenta Previa" and "Congestion of the Uterine Circulation" takes up the most of this chapter, several cases are given in illustration of this state of the uterus, with the appropriate treatment.

Chapter viii. is confined to the subject of leucorrhœa as a cause of abortion. This subject is handled rather extensively, and, as we conceive, somewhat thoroughly. Two forms are spoken of, viz.: mucous and purulent. The first of these Mr. W. believes to be purely an affection of the mucous membrane of the vagina. The distressing itching of the vulva, which frequently accompanies this form, may be promptly relieved for the time being by the use of the following lotion :

℞ Acidii Hydrocyanici, m. ix.
Morphiæ Muriatis, gr. viij.
Aqua Destillatæ, ℥ viij. Misce, fiat lotio.

This form is seldom the cause of abortion, except in those cases where great debility is induced by its long continuance. The best remedy for this affection is a solution of the nitrate of silver, one scruple to half a pint of distilled water. Purulent leucorrhœa is of very frequent occurrence, and in all cases, where it does exist, it may be looked upon as indicative of suppurative inflammation. The symptoms are readily distinguished and the diagnosis easily made out, if not by means of the toucher, at least by the use of the speculum, when it will be found in most cases the result of inflammation or superficial ulceration of the os or cervix uteri.

Chapter ix. treats of the organic diseases of the gravid uterus as a cause of abortion. The following is his division with a condensed description of their leading symptoms :

"1. *Inflammation* and *superficial erosion* of the lower part of the uterus, implicating one or both labia, and more or less of the external and internal cervix ; accompanied by a yellow vaginal discharge which is occasionally tinged, sometimes largely mixed, with blood. This affection commonly interferes injuriously with the process of utero-gestation in the seventh, eighth, and ninth months of pregnancy.

"2. *Varicose ulceration*, commonly occupying the back part of the anterior labium, sometimes being confined to the posterior, and, occasionally, implicating both, is a frequent cause of abortion. It is always attended with a considerable degree of vascular hypertrophy of the adjoining parts. The discharge is muco-purulent, sometimes grumous or sanious : it is often largely mixed with blood, and, in some cases, is replaced by a dribbling hemorrhage which may continue for weeks or months uninterruptedly, if active measures be not adopted for its relief. Varicose disease oftener becomes troublesome during the latter than in the first half of pregnancy ; and consequently, for the most part, interferes with the process of utero-gestation after the period of quickening.

"3. *Œdema* of the womb. The cellular structure of the cervix during pregnancy is often more or less loaded with serum, which may make its escape either slowly and constantly, or by sudden gushes of considerable quantity at a time, as if the animal membrane had been ruptured. The same parts are also sometimes similarly distended by congestion of the venous capillaries ; but there is a well-marked difference between the two. Abortion sometimes occurs in the latter months of pregnancy, under these conditions.

"4. *Fissured ulceration* of one or both commissures, of the anterior or posterior labium, or implicating all these parts at the same time, together with inflammatory hypertrophy of the adjacent structures. This state of parts is accompanied with a yellow vaginal discharge which is sometimes mixed, in variable quantity, with blood ; and it predisposes to abortion about the middle period of pregnancy, from the end of the third to the end of the sixth, or middle of the seventh month.

"5. *Induration* of the cervix, with or without abrasion of surface, is generally a chronic affection, but assumes more the acute character during the existence of pregnancy. It is, for the most part, accompanied with a vaginal discharge, which, if excoriation or ulceration of the labia be co-existent, is of a yellowish color : but white and glairy, frequently transparent and gelatinous, when the surfaces are unbroken. Abortion most commonly happens, under this state of parts in the third and fourth months of pregnancy, and is always attended with considerable suffering.

"6. *Endo-uteritis*, or inflammation of the lining membrane of the uterus during pregnancy, is frequently accompanied with hypertrophy of the whole organ, sometimes with induration of the cervix, or erosion of one or both labia. The discharge is usually thin, comparatively scanty, having a sanious or ichorous character, and is sometimes decidedly sanguinolent. Under this form of disease the product of conception is frequently thrown off during the first few weeks, or in the second or third month of pregnancy, accompanied with profuse discharges of blood, and often with intense suffering, similar to what takes place in some of the worst forms of dysmenorrhœa. I shall have occasion to revert to this affection in the next chapter, as a common condition of sterility.

"7. *Follicular ulceration* sometimes constitutes the leading feature of uterine disease in cases of abortion. Of itself, however, it does not appear to create any considerable inconvenience ; except on account of the irritable and inflamed state of the deeper-seated structures with which it is occasionally, though not always, associated, and to which circumstance therefore, any important functional inconvenience occurring during pregnancy, may be reasonably referred.

"8. The *gonorrhœal virus* is sometimes, perhaps frequently, implanted upon the lower surface of the uterus, being followed by inflammation of specific character, and accompanied with purulent discharge which may become very abundant, and difficult to be distinguished from that which women commonly denominate the yellows,—the result of simple erosion. The accompanying inflammation implicates the labia and adjacent cervix, and is especially liable to be extended to the lining membrane of the organ; it thus constitutes a frequent cause of abortion, which may occur at an early or late period according to the extent and severity of the affection.

"9. *Syphilitic* disease, both in its primary, secondary, and tertiary stages, is capable of inducing abortion at any period of the process, but most frequently perhaps about the sixth and seventh months. In the secondary form, its presence may in many instances be detected in the uterus, years after it was believed to have been eradicated from the system, and when no other evidence of its existence but this can be discovered, until is is seen to develope itself in unmistakeable characters in the offspring. The appearances presented by the labia and cervix of the womb affected with secondary syphilis are striking, and, I think, peculiar to this class of affections : they must therefore be regarded as of considerabie importance in diagnosis.

"10. *Prolapsus uteri.*"

Most of these divisions are illustrated by cases intended to show the course of treatment pursued, as well as the results of that treatment, and had we sufficient space, we should be induced to make a few selections of the most interesting, which would, we have no doubt, prove, to say the least, worthy of a careful perusal. It is difficult to pass by altogether, the subject of endo-uteritis, for if we mistake not, this is a very frequent cause of abortion in the early period of pregnancy, having had its foundation laid in that continuous form of dysmenorrhœa so frequently met with in irritable females, and who have neglected to obtain appropriate treatment, (for this form of dysmenorrhœa is readily amenable to treatment,) it continues to be a cause of abortion not unfrequently for several successive pregnancies. Its pathology is the same as that of inflammation of the mucous tissues elsewhere, and when persistent gives rise by extension to other parts, producing enlargement of the body of the uterus. Its symptoms and treatment may be gathered from the following case :

"*Six abortions in succession, occurring in the second and third months of pregnancy ; endo-uteritis ; cure.*

"Mrs. B., a lady in respectable circumstances, aged twenty-nine, of the sanguine-bilious temperament, was married at twenty-two years of age, having previously enjoyed good health. During the early part of her first pregnancy she had an attack of inflammation of the bowels—(metro-peritonitis most probably ;) and, during convalescence, a yellow leucorrhœal discharge came on, which has continued ever since. The child had purulent ophthalmia, which ended in loss of sight of one eye; it died aged nine weeks. Her second pregnancy was attended with much suffering, and frequent threatenings of abortion. The child, born at the full term of utero-gestation, had purulent opthalmia from which it recovered, and is now living. Her third pregnancy terminated at three months; her fourth, fifth, sixth, seventh, and eighth, in the seventh or eighth week of the process, without assignable cause; the circumstances being similar in all the instances, and the attendant phenomena exhibiting the same characters in each case respectively. These six abortions occurred in the space of three years.

"When not pregnant, she menstruated monthly; the discharge, which was in considerable abundance, sometimes clotted, and continuing six or seven days each time, being preceded by augmentation of the leucorrhœal secretion, violent lumbar and hypogastric pains, bearing-down, palpitation, nausea and vomiting, rigors, and irritative fever. During the existence of pregnancy, menstruation was suspended, but the suffering became increased. Each abortion was preceded for several days by uterine hemorrhage, which often passed away in clots, accompanied with violent bearing-down pain of an intermittent character. A distinctly-formed substance, regarded as the product of a 'false conception,' was expelled on each of these occasions.

"I first saw this patient on the 10th of February, 1847, the day after her sixth abortion. Since her delivery on the previous day, she had been perfectly free from labor-pain. The substance produced as the product of conception, was partially enveloped in coagula, which being cleared away by washing in water, appeared as a globular tufted mass, about the size of a large walnut; the tufts, which were those of the chorion, were equally perfect on all sides, showing that its implantation upon the decidual surface had not been effected. This enclosed a cell nucleus containing the ovum, which had acquired the size of a large orange pippin. The hemorrhage had been considerable, and was still flowing. The body of the uterus was large, and painful upon slight pressure; the cervix thickened and elongated, and the labia were pouting and unusually firm. Specular examination was not at this time attempted. The treatment, during the first few days, consisted in the exhibition of a cooling saline aperient at intervals, and of two grains of opium combined with the same quantity of *hydr. subm.* at bed-time.

"A fortnight afterwards, the patient expressed herself as being in about the same condition as she had been at a corresponding period after her previous abortions. She was exceedingly pale, languid, alternately chilly and feverish, without relish for food, unable to sleep, and complained of constant aching of the loins and hypogastrium, a fixed pain of the right side of the abdomen, below the level of the umbilicus, and "inward piles," the voidance of the fæces being attended with considerable suffering. The body and cervix of the uterus were still large, hard, and painful to the touch. The labia, on being viewed through the speculum, presented a tense, glistening aspect; their opposing surfaces were of a vivid redness, as if erysipelatous, and this appeared still more intense within the orifice, from which exuded a quantity of a thin, brown sanies, emitting an offensive odor.

"The treatment consisted in repeated small bleedings from the sacral and inguinal regions alternately, at intervals of four or five days; in the exhibition of five grains of the cinchona extract combined with an eighth of a grain of *hydr. oxym.* twice daily, an occasional opiate at bed-time, and a dose of *decoct. sarsæ co.* three times a day. The weak solution of nitrate of silver was twice injected within the uterus in the manner recommended at page 155. In from three to four weeks, she was quite free from pain; the uterus appeared to have subsided to its normal dimensions, and was no longer irritable under pressure; the discharge had entirely ceased; and the general health was remarkably improved. She menstruated during the last week in March, and again at the end of April; being on the last occasion, entirely free from all feeling of discomfort or inconvenience."

It is this form of disease which commonly gives rise to the spongy state of the uterine portion of the fœtal membranes, so well described in Dr. Granville's Graphic Illustrations of Abortion. There is another cause of abortion, which in large cities is frequently met with, we mean syphilis. The influence of this disease as a cause of abortion is admitted by most writers upon this subject, but still its ultimate bearing is not well understood. Secondary syphilis is the form most frequently met with, that it is equally prevalent and far more disastrous in its effects upon the female sex, there can be no doubt, and that the constitutional difficulty is frequently transmitted from the mother to the embryo, is equally certain.

The local pathognomonic signs of the effects of constitutional disturbance, as seen in the condition of the uterus, are reduced by our author to a tabular form, of which the following in the order of their occurrence may be enumerated:

"1. *Endo-cervicitis*, or inflammation to greater or less extent, of the lining membrane of the cervix uteri, with inflammation, excoriation, or ulceration of the labia around the uterine orifice. This appearance was noticed in nineteen out of twenty-eight cases. 2. A *mottled* or *patchy* appearance of the cervix, consisting of a number of dark-red spots of irregular shape, surrounded by lighter colored portions; they sometimes appeared highly irritable and excoriated, but not aphthous. The whole cervix was generally enlarged and slightly indurated, and there was evidence, in most cases, of endo-cervicitis. This state of parts was noticed in eleven out of twenty-eight cases. 3. *Aphthæ* of the cervix, occurring in eight out of twenty-eight instances. The patches, which appeared perfectly white, of a circular or oblong shape, situated upon a dark-red base, were easily detached by the aid of lint, and left a bright-red surface of similar form and dimensions, having, in some instances, a very minutely granular aspect. These were associated with hypertrophy of the cervix, and sometimes endo-cervicitis. 4. *Warts* were witnessed in three of the cases registered in the preceding table—twice on the cervix, and once on the walls of the vagina. They were all associated with endo-cervicitis and hypertrophy of the cervix. These excrescences were witnessed, however, in many of the instances not tabulated. Inflammatory induration or hypertrophy of the cervix was present in most of the cases recorded in the table, and there was not unfrequently observed an extremely corrugated state of that part of the vaginal mucous membrane lying in immediate contact with the bladder, and beneath the arch of the pubis, with hypertrophy of the cellular structure surrounding the urethra and about the neck of the bladder."

Several very interesting cases are given, showing the effects upon the mother as well as upon the offspring, *(infantile syphilis,)* in cases where they are viable. The treatment is well illustrated, of which the following may be said to be a synopsis: 1st. In cases where ulceration of the os or external organs exists, the immediate free use of the nitrate of silver must be resorted to. 2d. In the secondary form the careful use of hydrar. sub. mur., combined with opium, must be used, great care taken, but in a very slight degree, to bring the system under its influence. Conjoined with this should be used a decoction of sarsaparilla comp. with small doses of iodid. pot. The benefit derived does not depend so much upon the sarsaparilla, according to our author, as upon the mezereon and guaiacum which it contains. He has also derived much benefit from the use of several indigenous remedies, such as the *solanum dulcamara, arctium* *lappa* and the *rumex hydrolapathum.*[*] This latter should be combined with the *taraxacum*. These may be used in the tertiary stage with great benefit. Often after a few large doses the effects are distinctly seen, but it should be continued for several weeks.

Chapter x. treats of "sterility," 21 pages are devoted to this portion of the work. M. Donné's work, (*Cours de Microscopie*,) is largely drawn upon in relation to the physiology and pathology of the spermatozoa or spermatozoides, as they have been called by some recent eminent physiologists. After which the subject of the pathology of uterine barrenness is taken up. Cases are related bearing upon the influence of *sanious leucorrhœa*, *endo-uteritis*, *syphilis*, *ulceration of the os*, &c., all of which receive a very good description. The treatment of endo-uteritis in cases of sterility by injections of nitrate of silver is highly recommended. How he should pass over the subject of peritonitis and its effects upon the pelvic viscera, producing adhesions and disorganization of the ovaries, fallopian tubes, disease of the graaffian vesicles, it is difficult to say, they are subjects equally important in forming a prognosis.

In conclusion, we rise from the perusal of this work, feeling somewhat disappointed. From the facilities enjoyed, and the material afforded, which, to use Mr. W.'s own expression, "is probably unequalled by any (institution) of a similar character in the kingdom," we did expect a more complete and mature work. The subjects treated are, as we remarked at the commencement of this review, exceedingly important, and to the general practitioner often a source of much perplexity. We sincerely hope that at some future period the writer may be induced to present the profession with a second edition, more perfect and comprehensive than the present. We do not wish to be understood to say that the work before us is possessed of no merit, and not calculated to facilitate the study of these diseases; no, by no means; for in it may be found a mass of facts, which, if properly condensed and arranged, would serve much to elucidate the study of the diseases treated of—facts which no where else can be found on record, and facts, which, in the hands of the practitioner of medicine, may serve much to assist him in the discharge of his difficult and responsible duties.

---

[*] "The virtues of this remedy in the secondary, or rather in the tertiary forms of syphilis, cannot be too highly extolled. It is the *Rumex Hydrolapathum*, not the *acquaticus* formerly spoken of as an anti-syphilitic. The two varieties present very nearly the same physiognomical characters. The *Hydrolapathum* may readily be distinguished, however, by having its leaves *acute* at each end, and slightly glaucous, or mealy; whereas, those of the *aquaticus* are *cordate-oblong*, and their surfaces smooth and glossy. Moreover, the petals of the former are nearly *entire*, and unequally *tuberculated;* those of the latter are *reticulated*, and without tubercles. The sensible properties also of the root—the only part of the plant recommended for use—are considerably different in the two varieties: these in the former, being much more bitter, more powerfully astringent, than in the latter, and moderately blended with an agreeable acidity. I have for several years used it extensively both in public and private practice with the most gratifying results, in cases where sarsaparilla had been given in large doses for many months together without the slightest benefit.

"Hydrolapathum will be found equally serviceable in several forms of disease besides those of syphilitic origin, especially in some chronic cutaneous affections, glandular enlargements, atonic dyspepsia, and others essentially connected with a bad habit of body. It may be advantageously conjoined with *taraxacum*, and sometimes with senna, or rhubarb. It possesses the additional recommendation of being exceedingly cheap, and easily prepared for use."

ART. X.—*The Principles and Practice of Midwifery.* By DAVID H. TUCKER, M. D., Professor of the Principles and Practice of Medicine, &c., Philadelphia, 1848: Lindsay & Blakiston, royal 12mo., pp. 405.

THIS volume is one of a series entitled the Medical Practitioner's and Student's Library, and is professedly without the slightest claims to originality, "but based upon the valuable materials derived from the numerous works, both American, English and French, which have been published within the last few years."

Whether the compilation was demanded more by the profession, than by the commercial enterprise of the publishers; whether, in other terms, a book to read, or one to sell, was most required, remains for the author and his readers to decide. A striking discrepancy between the title of the book and its contents, does not greatly strengthen the supposition that scientific utility alone, was consulted in the preparation of the work. "By the term midwifery," remarks the author, "we mean that branch of the science of medicine which treats of the management of females during pregnancy, labor, and the puerperal state." Yet, throughout the book, no allusion is made to the perplexing and hazardous affections immediately connected with parturition, peritonitis, inflammation of the uterus, mania, and many other diseases appearing during the lying-in period, are surely *puerperal states*, and come sufficiently under the especial cognizance of the accoucheur, to receive some attention from a source professing to furnish the "principles and practice of midwifery."

But without dwelling on these important omissions, which it may be in contemplation to supply in a subsequent volume of the library, we pass to the matter of the pages before us.

The first two chapters are employed in detailing the anatomy of the pelvis and female organs of generation.

The 3d chapter is devoted to a consideration of the physiology of the generative organs. Dr. Tucker observes, in treating of menstruation: "Menstruation must be regarded as a phenomenon consequent upon or secondary to the full development of the generative system, and closely connected with periodic discharge of *ova*."

Connected with the subject he refers in a general way to results, and deductions from the interesting experiments of Bischoff, Pouchet, Raciborski and others; "1. In animals, a discharge from the organs of generation takes place at stated periods, which bears a strong analogy to the catamenia in women. 2. In animals this supposed catamenial period is always coincident 'with heat,' or rutting. 3. If, during this discharge, the ovaries of animals be examined, it will be found that the ova maturate and are thrown off into the fallopian tubes, entirely independent of sexual intercourse. 4. In women, who have died during, or near, the menstrual period, the ovaries are found congested, and there exist small excavations within them, from which the maturated ova have been discharged, as in animals, entirely independent of coitus."

Description of the ova, of the manner in which ova are separated from the ovaries; of their progress and development; we may only mention the increased perplexity the late doctrines of their separation create, as to whether fruitful sexual intercourse is requisite for the formation of true corpora lutea. That a difference exists between the size, color, figure, vascularity, and texture of a corpus luteum, succeeding the maturation of an ovum, at the time or subsequently, fecundated; and the corresponding qualities of a body following the separation of an ovum, at the time or subsequently, unfecundated; that in other words there are true and false corpora lutea, we have not the slightest doubt from our own observations. But why should this difference obtain, if the process of maturation, is *in all instances* independent of seminal fluid? After having received the theory of a periodic discharge of ova, independent of coition, we find Dr. Tucker in the position from which we would have him extricate us. He thus discourses:

> "We may conclude then that the corpus luteum, resulting from conception, differs considerably from that formed after the maturation and discharge of ova, independent of coitus. Why this difference should exist, it is difficult to say, since the organic process of maturation and discharge is identical in the two cases. It has been supposed that the vivification of the germ, and its subsequent retention within the uterus, may exert a reflex influence sufficient to vary the degree of development of the granules, which line the inner membrane of the ovisac."

The author's attempt at a reconciliation is not likely to prove availing. The supposition he brings forward resorts to that vague expression, *reflex influence*, which from its unwarrantable employment has become to many persons only a *reflex avowal* of perfect ignorance.

In his lectures to his class, Prof. Gilman offers a more satisfactory explanation on the possibility that a greater degree of excitement and vascularity is produced in the ovarium, by the presence of semen within the uterus or fallopian tubes, than occurs when seminal fluid is absent, and from this increased excitement different formations result.

The matter would be readily solved, were we to admit the possibility of fecundation taking place in the ovarium, in which case, the development and maturation of ova, and the results from such maturation would be directly modified by impregnation.

Of course it is desirable in a medico-legal point of view to ascertain how far corpora lutea, are evidences of recent impregnation.

> "Many persons have considered the existence of a so-called true *corpus luteum* as an infallible test of previous conception; others have maintained that no distinction could be really made between the false and true *corpus luteum*;

and that, therefore, the existence of this body could not be relied upon as a sign of impregnation. R. Lee, Wharton Jones, Montgomery, and others, insist that there is a distinction between the true and false *corpora lutea;* while Bischoff, and originally Raciborski, asserted that the simple maturation of the *ova*, without either impregnation or coition, produced *corpora lutea* identical with those formed when conception occurs.

"Dr. Montgomery's remarks upon the subject seem to us to settle it, especially as he is supported in his opinion by Lee, Jones, Raciborski, Pouchet, &c. He says, "In no one instance did I ever find a *true corpus luteum*, except as a product of conception; and reasoning merely on the subject, I would ask, if mere imagination or highly-excited desires, without intercourse, are capable of causing such a change in the condition of the ovary, should we not expect to find corpora lutea, almost invariably, in women who have been living with their husbands, or otherwise enjoying constantly the natural and perfect excitement of the generative system, without conception? Of the non-occurrence of which consequence, I can speak in very decided terms, from numerous opportunities of making examinations under such circumstances."

In a paper published in the seventh volume, of this journal, p. 304, Dr. S. S. Purple details the results of his investigations toward settling the question, and as his conclusions were drawn from a close and well-directed observation we owe our readers his impressions on the subject. He says: "From the numerous examinations which we have made of the ovaries of human females, at all ages and under all conditions of health and disease, during childhood, at puberty, before, during, and after menstruation, at the various periods of gestation, and after delivery, we are firmly of the belief that the *true corpus luteum is an infallible sign of conception;* and that the great diversity of opinion which has been put forth relating to the value of this body as an evidence of conception, has arisen from the want of a proper knowledge of the physiology of the ovaries, consequently confounding and calling all yellow bodies or spots corpora lutea."

Our own opinion fully coincides with that of the foregoing authorities. We have never found a body answering Dr. Montgomery's description of a true corpus luteum in either ovarium of a female, who had not been impregnated within the last twelve months of her life. Nor have we ever examined the ovaria of a woman, who had conceived within that time, without meeting a body which corresponded with the corpus luteum of Hunter, Montgomery, Lee, Jones, &c.

In relation to twin conceptions, it has been said there may be but one corpus luteum. Recently we discovered one of an unmistakeable character in each ovarium of a woman who had been delivered of twins, and who died the third day after delivery. The children were surrounded by separate membranes.

The author's plan for his remarks on labor may be learned from the following observation:

"We have made no classification of labors, but have preferred classifying the different presentations into *those* which require little or no assistance in delivery, as the vertex, face, and breech presentations, and *those* which require assistance, as in cases of shoulder presentations, since each one of these presentations may be accompanied by any one of the accidents, to be mentioned hereafter, as complicating labors, we have thought it unnecessary to specify labors as lingering, flooding, instrumental, &c."

His directions for the management of those cases which require little or no assistance are judiciously and well conveyed. On the complications of labor opportunity is taken to introduce a lengthy extract of a translation, from the work of Mr. Cazeaux, dwelling chiefly upon the influence of rheumatism during pregnancy, parturition and the puerperal months.

Two chapters on uterine hemorrhage are principally occupied with the consideration of Dr. Simpson's practice in cases of placenta prævia, and Dr. Radford's advocacy of the same, together with the employment of galvanism for producing uterine contractions. Dr. Tucker does not receive the former gentleman's explanation of the reason why there is a total cessation of hemorrhage in placenta prævia cases after complete detachment of the placenta. He says :—

> " But is it true that the principal source of hemorrhage, in partial detachment of the placenta, is from the surface of this body, and not from that of the uterus ? We think not, because the blood-vessels, which actively transmit blood from the mother toward the placenta, would be much more apt to bleed, when ruptured, (as they must be when the placenta is detached,) than would the placental vessels, the current of whose circulation is directed towards the fœtus. That the latter may bleed some, cannot be doubted, but that the former bleed more, seems to us equally true."

Nevertheless he regards the treatment Dr. Simpson's views suggest with approbation.

> " But our dissent from the explanation of Dr. Simpson does not necessarily imply a dissent from the plan of treatment he proposes. His treatment is based upon the positive fact that, in unavoidable hemorrhage, the complete separation of the placenta is usually followed by an arrest of the hemorrhage. . . . . It may then be assumed as settled, that inasmuch as the hemorrhage is usually arrested as soon as the placenta is completely detached, the mortality, in Dr. Simpson's mode of treatment, is much less, as far as the mother is concerned, than where turning has been resorted to; but that in the former case, the death of the child is almost certain, whereas in the latter, there exists some chance of its being born in a viable condition. The question then is this, is it better to resort *to an operation* which saves one child in four, but allows the sacrifice of one mother in three, or *to one* by which every child is lost, but by which only one mother in fourteen perishes ?"

Upon this subject Dr. Tucker concludes to lay down the following rules:

> " 1st. That the plan proposed by Dr. Simpson, is most favorable to the life of the mother, but most injurious to that of the child. 2d. That this plan is applicable only ' in severe cases of unavoidable hemorrhage, complicated with a rigid and undilated os uteri, in which turning would be impossible or hazardous ; in most primiparæ ; in unavoidable hemorrhage, with premature labor, and an undeveloped condition of the os and cervix ; in placenta presentations, with distorted pelvis ; in cases where the extreme exhaustion of the patient forbids turning, and where the fœtus is ascertained to be dead, or is premature and not viable.' 3d. That in ordinary cases of unavoidable hemorrhage, turning may be relied upon."

Following this matter is an excellent chapter on the *deformities of the pelvis*, and the causes of the different contractions to which the pelvis is liable, referred to three classes.

> "1st. Rickets. 2d. Mollities ossium. 3d. Arrest of development. In addition to these, there are some occasional causes which may produce pelvic deformity, such as luxations of the femur, amputation of one thigh, fractures of the pelvic bones, exostoses, &c."

Still another cause, which produces contraction of the pelvic outlet, might be mentioned with propriety, viz: healthy, muscular action. The osseous system, is subject alike with other tissues, to the law, that development shall equal the demand of exertion. Hence we find, in rural districts and among females following laborious occupations in cities, the pelvis often assumes masculine characters from the acquired necessity of a firmer structure and more extended surface for the muscular attachments of the inferior extremities. The tubers of the ischia are rough and large; the pillars of the pubic arch, approximated; the sacrum loses a degree of its curvature, and its transverse ridges become more prominent.

The nature of pelvic deformities are classified by the author as follows;

> "1st, the *abnormally large pelvis;* 2d, the *dwarfish pelvis;* 3d, the *unequally contracted pelvis;* 4th, the *obliquely distorted pelvis*, as described by Nægelè."

The inconveniences attending the existence of each of these classes are lucidly explained. But we find no mention made of the masculine pelvis just alluded to, notwithstanding its greatest comparative frequency in this country. However, as a compensation for the oversight, we read the following remarks, under the head of *the unequally-contracted* pelvis, which may serve as our description of the obstructions produced by active and long-continued muscular action on the sacrum and ischia.

> "The diameters of the inferior strait are often contracted by too great approximation of the tuberosities of the ischia, and inasmuch as this may take place independent of any disease, so also may it exist without alteration of the size of the pelvic brim. This form of contraction has been termed the *funnel-shaped pelvis*, and when it exists, the head may traverse with facility the brim and the excavation, and only becomes arrested in its progress, when it has arrived at the inferior strait."

We are confident that attention is not given this class of pelvic deviations which its comparatively frequent occurrence demands. Not one of the forms most dwelt upon by Dr. Tucker has been the subject of our personal observation, whilst repeatedly have we been called upon to render manual assistance in cases of arrest from contraction of the outlet. In fact since commencing this article, we have delivered a strong hardworking and muscular woman, of her first child, after a delay which had, at least, nearly proved fatal to the child, and which arose from the foregoing diminution of the inferior strait. In the case to which we refer, the os uteri had been perfectly dilated, the membranes ruptured, and the head occupying the pelvic excavation under expulsive pains, for twelve hours.

Examining the outlet, the soft parts were found soft and distensible; the tubers of the ischia felt from within the vagina were large and irregular; the pillars of the pubic arch were increased in size, and formed an angle under the symphysis of 65 or 70 degrees. Passing a finger between the head and the pubic rami, it was pressed upon with no inconsiderable amount of discomfort to the operator,—the head advancing to the bony outlet under each pain, and receding as the uterus relaxed. Such had been the patient's condition during the time specified:—her labor was terminated in all respects favorably, by the application of the forceps.

Now this case is only an illustration of the vitiation constantly coming before our notice, whilst the deviations and more manifest deformities elaborately detailed by European authors, and the descriptions of which are so diligently copied by our own writers, very seldom offer to exercise the judgment of the practitioner.

The signs indicating an alteration in the figure of the pelvis are divided into the *rational* and *sensible*. As an approximative rule deduced from the former, it may be laid down:

> "Where the inferior extremities are unusually short, or unequal in length, or softened by disease, the pelvis, in a large majority of cases, has undergone some deviation in form and capacity. Again, in cases of spinal deformity, unaccompanied with any affection of the inferior extremities, the pelvis usually remains unchanged.
>
> "If the female be short and the arms long, when compared with the rest of the body, the chin projecting, the legs short and crooked, some deformity of the pelvis may be suspected."

It may also be said with equal justice, when a female possesses an unusually firm and ample muscular development, with large hands, wrists, and ankles; short and thick phalanges; harsh features, and irregular teeth; we may be prepared to find a pelvis less calculated to bear children with facility, than afford a substantial frame work for supporting the body, and a secure attachment for the organs of locomotion.

By the *sensible* signs of deformity Dr. Tucker would be understood those ascertained by internal and external measurements. He describes the instruments of Baudelocque, and Contouly, and Van Huevel's modification of the latter,—he also gives their rules and modes of employment, adopting as the instrument possessing the most excellencies, that of Van Huevel. Yet we believe with him, "manual exploration offers much more accurate results in determining the form and capacity of the pelvis." Setting aside altogether, rules and figures for nicely estimating the size of the pelvis, we agree with Dr. Blundell when he says, "by passing the fingers between the bones and the head,—by ascertaining what is the condition of the head, and more especially the existence or the absence of a swelling of the scalp;—by learning what *has been* the duration of labor under strong pains after the discharge of liquor amnii;—by making out whether the promontory of the sacrum can be felt with facility or not;—and by inquiring of the patient what has been the result of previous labors;—I am enabled to say, in most cases, without difficulty, whether there is such a contraction of the pelvis as demands the use of instruments. To me it matters little what is the precise measure below or above. With measures of a line or a quarter of a line I have little concern. All I want to know is, whether there is such a contraction above as to require the use of instruments, and by the means just described, I am enabled to ascertain it, without resorting to nicer measurements."

The operation of *turning* has devoted to its consideration one chapter of the twenty supposed to comprehend the principles and practice of midwifery. We are pleased not to find an approval of another of Dr. Simpson's views and practice in the matter of version. The learned professor argues at some length upon the advantages of grasping the child's *knees* instead of its *feet*, as usually practised. One of his principal advances, we believe, is, that in seizing the feet and bringing them first down into the pelvic cavity, the legs of the child are made at one period of the operation to stand out from the body at right angles. Another is, that less force is requisite to turn the child when the knees become the points of traction. Now as one experiment, in a question of medical practice, is more valuable than volumes of theoretical reasoning, let a new-born child be placed upon a table, its feet, legs and thighs, flexed upon the abdomen, occupying the same relation they did in utero, and it will be found almost impossible so to extend the legs as to form right angles with the body of the child. They become extended by a movement which requires no more space between the uterus and the anterior face of the child's body than is required by their thickness. If, then, a great increase of thickness in the fœtal ovoid is so easily avoided when there exists no surrounding compression, we have little to fear when the uterine fibres tend strongly to preserve each part of the fœtus in close contact with another. As for the greater ease with which version may be performed by grasping the knees—we have in several instances endeavored to obtain it. The result has been, to teach us in future, not to meddle with the knees; but on all practicable occasions proceed at once to the fundus of the uterus and secure the feet; we shall thus save ourselves much time and labour, and our patient no slight amount of suffering and anxiety. We have no doubt similar attempts on the part of others would afford the like instruction.

In the author's directions concerning version, we find the following:

> "If the uterus be firmly contracted upon the body of the child, version will be rendered extremely difficult. In these cases, if the head presents in a favorable manner, it will be best to apply the forceps, but if there should exist a presentation of the body of the child, version alone is practicable, and in order that it may be accomplished, copious venesection, opiates, &c., should be freely resorted to. Where these remedies fail to induce sufficient relaxation, our only hope is in spontaneous evolution, and if this fail to occur, no other resource remains than to mutilate the child in the manner which will be explained hereafter."

One of the most potent agents for producing muscular relaxation is chloroform. Though the question may be raised, has it this effect upon the uterus? We answer, it has for a short time after exhibition, especially if complete anæsthesia be produced. Sufficient time will generally be allowed between the first moment of perfect insensibility and the recurrence of uterine action, for introducing the hand within the uterus and turning the child. In some instances, ten, and in others, fifteen minutes will be found to elapse before the uterus resumes its contractions—much however depending upon the suddenness and degree with which the system is impressed by the vapor. Our experience with its use for relaxing the uterus under the circumstances above alluded to, is confined to one case. The patient had been in labor several hours; the liquor amnii discharged half an hour; pains expulsive and energetic. The arm was found in the vagina, the shoulder occupying the mouth of the womb, strongly pressed down into the lower pelvis. It was deemed unsafe to attempt version immediately, so strongly did the womb contract. The patient was then rendered unconscious by chloroform inhalation. Every voluntary muscle relaxed; the pulse fell from 75 to 60 per minute; respiration deep; uterine action suspended, and the patient apparently slept. Upon the superinduction of anæsthesia the hand was carried up to the fundus of the uterus, the feet seized and brought into the vagina without difficulty. Chloroform being removed from the patient, sensibility returned, and with sensibility, labor-pains,—which with slight assistance as the head came to fill the pelvic cavity,—safely delivered the woman.

We are aware some practitioners state chloroform does not interfere with the functions of the uterus in parturition. Occasionally it does not. But generally we have found it interrupt the contractions of the uterus for a short time, in the same way, we suppose, that any sudden and powerful impression upon the mind or body of a parturient woman delays her delivery. This interval therefore may be very serviceable, as under the foregoing circumstances; it has for another advantage temporary relaxation only, whilst venesection, opiates, &c., suspend muscular action or produce general prostration beyond a desirable duration, and so far from becoming in the end advantageous, prove positively injurious.

It has probably been since Dr. Tucker wrote, that so great success has attended the use of chloroform in arresting the paroxysms of puerperal convulsions. We have employed the agent in two cases of this nature—in the first of which the paroxysms did not re-appear after the inhalation of three drachms of the chloroform; whilst in the second, they were suspended during an instrumental delivery and returned much mitigated, only upon being excited by the noise and confusion of a crowded humble dwelling.

An extended chapter on the application of the forceps, one on the subject of premature delivery, and another upon abortion, conclude the work before us. Closing the volume we have only to complain of faults *of omission.* These we trust, for the character of the Library, will be rendered less important by articles in other parts of the series. The book, we feel convinced, is a useful compilation,—one containing much that the student would not acquire were he to confine his study to older authors, and one possessed of matter the practitioner may peruse with advantage. E. B. S.

Art. XI.—*Elements of General Pathology; a Practical Treatise on the Causes, Forms, Symptoms and Results of Diseases.* By Alfred Stille, M. D., Lecturer on Pathology and the Practice of Medicine; Member of Med. Soc. of Observation, Paris; Fellow of the Philadelphia College of Physicians, &c. Philadelphia: Lindsay & Blakiston, 1848, pp. 483.

Although this work has already received a short notice in the pages of this Journal, yet it being wholly from the pen of an American author, and treating on an important subject, we have deemed it worthy of a more extended examination. It commences with an introductory essay, of near twenty-five pages, on *Medical Truth,* after which it is divided into four parts, viz.: Part 1st. Ætiology, or the Causes of Disease, making three chapters. Part 2d. The general Phenomena, Theory, and Classification of Diseases,—General Diagnosis and Prognosis; making five chapters. Part 3d. Semeiology, or Signs of Disease, embracing six chapters: and Part 4th. General Morbid Anatomy, embracing five subdivisions or chapters. The work is well written, which is far more than can be said of all our medical books; and presents a very fair summary of the present condition of pathological science.

Hence it presents the student with a very interesting and useful volume for study. The introductory essay contains some valuable suggestions, among much that is of but little moment. The author divides *truth* into absolute, revealed, intuitive, and demonstrative; and declares that *medical* truth belongs to none of these. He says, "These several kinds of truth are intellectual chiefly; they have their origin in the mind; they are evolved, weighed, and applied by the mental faculties. But there remains another, and very different one. This is *inductive* truth. It is that which belongs to the physical sciences, which is the sacred element of all (so called) natural laws; the search after which is the life-spirit of astronomy, of chemistry, geology and medicine, whose progress has been rapid while it was active, and slow when it declined. It is that very truth which is 'the daughter of time and not of authority,' and which alone can outlive the waste of ages, and man's contempt and neglect. Its origin is not in the mind, but in external nature. Observation is the great instrument of its discovery, and next, experiment, which is observation under circumstances of our own choosing. Facts are its materials, co-ordinated facts contain its laws."

After dwelling at some length on this subject, he recommends very strongly the practice of committing all observations and cases to writing at the time, that we may never draw our conclusions from facts entrusted to the memory alone. This is an important direction, but has been much more frequently insisted on than practised by medical writers. "Three precepts," says Dr. Stillé, "may be laid down as fundamental, and essential in all researches after medical truth: 1st. That the cases must be observed and recorded honestly, minutely, and fully. 2d. They must be very numerous, the more so the better. 3d. They must be comparable." To the correctness and value of these precepts, we most cordially give our assent. But we cannot say as much in regard to our author's views of *truth*. For we had supposed that truth was essentially the same, wherever found; whether in medicine, mathematics, or morals. It is conceded that there are different modes of arriving at it, as by *revelation*, by mathematical *demonstration*, by *observation*, coupled with rigid *induction*, &c. But we had verily supposed that a *truth* in medicine, was just as *true* and as *absolute*, as a truth in mathematics or in theology. There may be more difficulty in arriving at truth in medicine than in mathematics, because of the more numerous and variable circumstances attendant on the former: but when once arrived at, it is equally certain, equally demonstrative; and is, in fact, the result of the exercise of the same order of mental faculties. In both cases, the result is obtained by comparison and induction. And it certainly makes very little difference in the nature of that result, whether the things compared are imaginary lines, curves and angles, or real objects of perception. For in both they must be mentally real and present; hence, if the comparison be correctly made, the conclusion logically drawn, the resulting truth is, in both cases, equally demonstrative and inductive.

But we hasten over the introductory essay, to arrive at those parts of the work of more practical interest to the reader. And first, what is general pathology? This question is answered by our author as follows: "General pathology treats of the causes of disease, whether they exist within the individual or around him; of its forms, stages, symptoms, and terminations; describes its ravages in the organs of the human body; and points out the best methods of investigating and interpreting the symptoms furnished by them, in all the morbid conditions under which they have been observed. In other words, it includes whatever is common to diseases in general, and to particular classes of diseases." (p. 50.) This definition, which is doubtless in strict accordance with the views generally entertained by medical writers, gives to general pathology a wide scope; making it include, not only the whole of morbid anatomy and morbid physiology, or the nature and results of disease, but also nearly all that is included in works on the theory and practice of medicine. It seems to us, however, that if we are to have the whole field of medical science divided into several departments, each division should be as clearly defined and trespass as little on every other as possible. Hence, for the sake of precision and accuracy in study, we should greatly prefer making the term *pathology* bear the same relation to a diseased organization, that *physiology* does to the healthy. The first part of the work, treating of the causes of disease, contains little calculated to elicit special notice. The author makes the usual division into *predisposing* and *exciting* causes, and each of these are again divided into general and special. The doctrines, now prevalent in the profession, respecting the influence of age, sex, climate, season, hereditary predisposition, temperament, heat, cold, contagion, miasm, &c. are very fairly presented; but without that critical examination into the correctness of some, and the modus operandi of others, that we would like to have seen in a new American work. We shall also pass over part second, which treats of the General Phenomena, Theory and Classification of Diseases; General Diagnosis and Prognosis.

Part third, treats of Semeiology, which our author defines to be "the *signs* of disease." And he indicates the difference between semeiology and symptomatology as follows: "The phenomena of disease are symptoms. All that instructs us in regard to what is hidden or obscure in the past, present, or future state of a disease, is a sign. . . . Hence every symptom may become a sign, but every sign is not a symptom; thus the character of the cause may be a sign of the nature, and probable course of the disease, but it is not therefore a symptom." Dr. Stillé makes the usual division of symptoms into *general* and *local,* to which he adds *sympathetic,* which though local, are developed at some point distant from that primitively affected and dependent upon its disorder for their existence." He then goes on to consider the signs derived from an examination of the various parts of the body, beginning with the external surface.

While speaking of the *color* of the skin, he refers to that interesting affection termed cyanosis, or *blue skin;* which has usually been supposed to depend on a mixture of the arterial and venous blood, on account of the foramen ovale of the auricles remaining open. It seems that M. Louis was the first to call in question this doctrine, so early as 1826; though Morgagni had related one case directly disproving it, which he dissected himself, and found the heart perfect with the foramen ovale closed; but the pulmonary artery was contracted and ossified. In 1843, Dr. Moreton Stillé," (brother of the author,) "in his inaugeral thesis, proved by the analysis of a large series of cases, that the cause of cyanosis was *uniformly* either contraction, obstruction, or imperforation of the pulmonary artery, or else some physical impediment to the natural course of the blood, possessing a similar mode of action, such as concentric hypertrophy of the right ventricle, singleness of the heart with contraction of the auriculo-ventricular opening, &c. This conclusion has since received ample confirmation, and especially from the investigations of Dr. Norman Cheevers, of London." See page 228.

According to this view, the obstruction to the passage of the blood from the right side of the heart to the lungs, gives rise to constant and universal congestion in the venous capillaries throughout the system. Hence, the livid or leaden color of the skin is owing to the obstructed and tardy venous circulation, instead of any mixture of venous and arterial blood. And even the opening of the foramen ovale is very plausibly represented as a result of such obstruction and the consequent distension of the right auricle, as was originally stated by Morgagni, in the case already referred to.

The following extract from the chapter on "signs from the digestive apparatus," will afford a very fair specimen both of the author's style, and his mode of treating the subjects which make up the work before us. "In all ages the *tongue* has been thought to furnish important information in disease, as well by those who have studied its various conditions, as by the practitioners who have made its inspection a mere occasion for mysterious looks, and oracular remarks.

"Its size and shape, and the characters of its coating have, at different times, been looked upon as positive diagnostic signs of disease, but these exclusive views have rarely outlived the persons who respectively gave them currency.

"Yet the conditions of this organ and of its functions, have in reality such a value as to entitle them to a full consideration. The tongue is the principal organ of the sense of taste, which is almost uniformly modified by disease. There is no more frequent sign of impending sickness, than the loss of a natural relish for food, and no surer indication of returning health than the recovery of this relish.

"The sick rarely receive from sapid bodies, the same impressions as in health; all the food prepared for them is equally insipid, nauseous or bitter, or they have constantly a perception of some one of these or other tastes. The insipid taste accompanies, especially, inflammation of the respiratory passages, including the nostrils, posterior fauces, and air-tubes. A bitter taste is most frequently experienced in dyspepsia, particularly in that form of it, attended with eructation or vomiting of bilious matter, and occasionally in those more distinct derangements of the liver, depending on inflammatory or structural disease of that organ, and which are accompanied by jaundice. An acid taste prevails in those other forms of dyspepsia, in which some regurgitations take place, and also in cancer of the stomach. A salt taste in the mouth, is a common precursor of hæmoptysis. A foul or putrid taste is generally due to diphtheritic inflammation, to suppuration, or to gangrene of some of the parts connected with the mouth, as the nose, throat, œsophagus, or lungs. It is also present in cases of obstinate and prolonged constipation. A metallic taste is usually the first sign of the constitutional influence of mercury; it is said also to occur in intermittent fever. In hysteria, hypochondria, and chlorosis, the taste is frequently perverted, and persons suffering under these complaints have often perceived the most exquisite flavor in chalk, charcoal, slate, and even in animal substances far gone in putrefaction. It is impossible to refer all of these morbid conditions of the sense of taste to one uniform cause. Some of these appear to be owing to the coating upon the tongue, while others may with more probability be referred to an altered condition of the nervous centres," p. 258.

Before leaving this part of the work, we must refer to one or two passages in this chapter on "signs from the circulatory apparatus. We have been taught by such men as Læennec, Williams, Gerhard, and indeed by almost all writers on diseases of the chest, that the *impulse* of the heart was produced by the systole or contraction of the ventricles. And that the force of such impulse was in direct proportion to the muscular thickness of the walls of those cavities. Hence a forcible and prolonged impulse has been very generally regarded as one of the least complicated signs of hypertrophy of the ventricles. Dr. Stillé, however, not only adduces proof from the writings of Drs. Pennock, Corrigan, and Chomel, that hypertrophy of the ventricles is not always accompanied by increased impulse; but also contends that the impulse itself is not caused by the systole of the ventricles. On this point he says, "the doctrine which appears to be most strictly in accordance with the facts, is, that the cause of the impulse is the *diastole* of the ventricle, its force being proportioned to the power with which the auricle propels its blood into the ventricle."

Independently of all experiment, it would be difficult to comprehend how the contraction of a hollow muscle could have any other effect than to diminish its volume, or that it could, while contracting, give a blow to a body external to itself. But vivisections of cold blooded animals confirm the justness of this objection to the received doctrine.

When the heart of a frog, which is transparent, is examined, the apex is seen to be thrust forward at the same instant that all the dimensions of the organ are enlarged, and its color shows it to be filled with blood, while the apex is retracted simultaneously with the lessening of the size, and the disappearance of the color of the heart. In other words, the projection of the apex corresponds with the diastole, and its retraction with the systole of the ventricle. Certain cases of malformation go to confirm this view. One such is reported by Cruveilhier, to this effect. A child was born with a deficiency in the upper part of the sternum, through which the heart projected. It lived nine hours. In this case the contraction of the auricles was exactly synchronous with the dilatation of the ventricles. During the ventricular systole, the heart contracted in every diameter, and no part of it was thrust forward except the apex, and that only with a slow spiral motion. The ventricular diastole, on the other hand, "'had the rapidity and energy of an active movement, triumphing over pressure made upon the organ, so that the hand closed upon it, was opened with violence.'" This movement was accompanied with a strongly-marked projection of the heart downwards. The rapidity, energy, and direction of the ventricular diastole here observed, demonstrate this movement to be the cause of the cardiac impulse. Very similar phenomena were presented in an analogous case reported by Dr. Robinson, of Petersburg, Va., in 1833; and both cases, it is plain, are in every respect confirmatory of the results obtained by vivisections of cold-blooded animals.

The combined evidence thus summarily and imperfectly produced, warrants, it is believed, the conclusion, that actual inspection of the movements of the heart, when made under favorable circumstances, teaches that the *impulse is synchronous with, and caused by, the diastole of the ventricles.*" (Pp. 319, 320.) And in regard to the impulse of the heart in hypertrophy, he further states that, "laying theories aside, if we compare any number of cases of cardiac hypertrophy, showing increased impulse, with another series in which the impulse is diminished, we arrive at a curious result, viz.: that in every one of the former class of cases, there is *auricular* hypertrophy, either alone or combined with a like state of the left ventricle; and that where the impulse is not augmented, or feebler than natural, there is either dilatation and thinning of the auricle, or the hypertrophy is altogether confined to the ventricle; in one word, we find that *permanently-augmented impulse of the heart coincides with auricular hypertrophy.*" And from all this he states, "the conclusion is irresistible that *the impulse of the heart is caused by the diastole of the ventricle, and proportioned to the muscular power of the auricle.*" (p. 322.) We have thus quoted Dr. Stillé's views on this subject, at length; not only because they were contrary to the generally received opinions of the profession, but because the question involved is one of much practical importance. For it is plain, that unless we correctly understand the causes and connections of the natural movements of the heart, we shall be continually liable to commit errors in our attempts to diagnoze the abnormal conditions of that organ. Taking into consideration only the facts presented by the author, his conclusions would seem to be well drawn; but when we compare them with the results of the numerous experiments performed by the British Physiologists, as well as those of Drs. Pennock and Moore, of Philadelphia, we confess that the weight of evidence seems strongly against him. But having presented both the facts and conclusions of Dr. Stillé, we leave the reader to canvass the question for himself, and hasten on to the last part of the volume before us. This occupies seventy pages, and presents a very brief summary of the present condition of *Morbid* or *Pathological Anatomy.* After alluding to the origin, progress, and value of this branch of medical science; and the mode of examining dead bodies, the author enters into a consideration of the blood in disease, and thus summarily, (and as we think, justly,) disposes of the long-controverted doctrines of *humoralism* and *solidism.*

"As all the tissues originate in the blood, and grow by the materials which it furnishes, the morbid relations of this fluid have a primary claim to be examined. It is not uncommon for writers of the present day to speak of the importance now attached to the morbid states of the animal fluids as indicative of a return to the old humoral pathology; but in doing so, they confound things essentially different. The humoral pathology adopted in the Hippocratic writings, and servilely followed in succeeding ages, was a pure hypothesis, which, as was stated in another place, assumed that the body was composed of four humours, whose various combinations produced diseases.

These combinations were, at the commencement of the seventeenth century, estimated by Sanctorius at eighty thousand. In the last century or two, much, indeed, was said of the acridity and putridity of the blood, and some imperfect notices of the physical changes occurring in that fluid were recorded. But there is little analogy between the views now entertained, concerning the influence of the blood in disease, and those speculative notions which ruled so long in medicine. The ancients not only imagined the humors, but also their qualities and effects.

With inquirers of the present day, the subject is simply one of observation, experiment, and induction. If here and there a medical chemist, impelled by the force of genius, and elated by the wonderful results of his favorite science, overleaps the bounds of legitimate reasoning, and wanders in the trackless field of speculation, but few among the more eminent pathologists are tempted to follow his erratic course. The soundest thinkers receive his revelations with distrust. There is in fact a general unwillingness to adopt them as settled principles, until they have been tested by men of large experience in studying and treating disease, by men who regard the animal economy as something more than a machine, and the stomach as something different from a chemical retort; who recognise in it a *vital* chemistry and vital dynamics, governed by other laws than prevail among the instruments of the laboratory, and the workshop." (Pp. 419, 420.) The composition of the blood in health, is given on the authority of M. M. Becquerel and Rodier, as follows, viz :

	Males.	Females.
Water,	779	791.1
Globules,	141.1	127.2
Albumen,	69.4	70.5
Fibrin,	2.2	2.2
Extractive matter and salts,	6.8	7.4
Fatty matter,	1.8	1.62

It will be perceived that there is a marked difference in the blood of the two sexes. That difference, however, seems to be confined chiefly to the proportion of water and globules.

There are few or no diseases of sufficient gravity to affect the system generally, that do not, at the same time, induce important alterations in the composition of the nutritive fluid, and of all its ingredients the *globules* appear to be the most variable. They are proportionally diminished by pregnancy, by bleeding, and by all diseases of an *anæmic* character. Thus, the average composition of the blood taken from 35 chlorotic persons was as follows, viz, :

Water	824
Globules	94.7
Albumen	68
Fibrin	3.5
Extractive matter and salts	8
Fatty matter	1.8

In extreme cases of this disease the globules have been found to constitute only 14 parts in 1000. According to the same eminent authors quoted above, the blood globules diminish as pregnancy advances, their mean proportion not exceeding 112.6, and that without any reference to the existence or non-existence of plethora. They also found the average proportion of globules in persons who had been bled three times, to fall from 129.2 to 99.2. And in all cases the deficiency of globules is supplied by an increased proportion of water. According to these facts, the old idea, that bleeding diminishes all parts of the blood alike, is hardly true; and if the globules should happen to be the unhealthy portion, we might almost fulfil the popular notion of "drawing out the bad and leaving the good."—But while a diminished proportion of globules is a pretty constant accompaniment of anæmia, it by no means follows that they are generally in excess in the condition of the system termed plethoric. M. M. Andral and Gavarret found the average proportion of globules in thirty-one plethoric persons to be 141; and MM. Becquerel and Rodier give as the average of six well-marked cases of plethora in males, 138. Hence says Dr. Stillé: "The authors just mentioned have established by their experiments, that the *plethoric condition*, and the symptoms incident to it, are probably the effect of an increase in the mass of the blood, and in nowise of any change in its composition."

This view is further strengthened by the fact, that we not unfrequently meet with decided symptoms of plethora in well-marked cases of chlorosis. We are told in the work before us, that the *fibrin* of the blood is chiefly altered in inflammations and fevers. In the former class of diseases it is uniformly increased, the average proportion being about 6 parts in 1000; but in some cases of pneunomia and acute rheumatism it rises as high as 10½. In the latter class it varies, of course, with the nature and type of the fever; being increased in those of an inflammatory character, and greatly diminished in all those of a typhoid type. Concerning the yellow or buffy coat, however, which has been so generally considered an index of inflammatory action, Dr. Stillé remarks: "But it has been ascertained that the buffy coat is very far from being the index of inflammation alone, or from constituting an index for depletion, as was formerly supposed; that it may exist in pregnancy, anæmia, and chlorosis, in all conditions, namely, in which there is a deficiency of the globules while the fibrin remains unchanged. Hence it appears that it is the quantity of the fibrin *relatively* to the globules, and not the positive quantity of the former, which occasions the buffy coat." (p. 427.) But we have neither time nor space to follow the author through all the changes in the several ingredients of the blood, during the progress of disease. There are, however, several questions of great practical importance suggested by this subject. 1st. Are the changes in the composition of the blood, primary disorders, giving rise to the morbid symptoms accompanying them, or are they, themselves, only symptoms or results of disordered action in some of the organs If the former, what are the causes which act directly on the blood? If the latter, what organs are connected with each specific change, and what is the nature of their derangement? These are questions left almost entirely untouched by our author, and which, indeed, require the most extensive research and observation to solve satisfactorily. Yet it is only by such solution that we arrive at strictly valuable practical results. Thus it aids us very little in the treatment of disease, to know that the proportion of globules of blood are diminished in chlorosis, or that the fibrin is diminished or changed in certain fevers, unless we at the same time know *why* they are so. That the blood is sometimes altered by the direct absorption of noxious materials, and thereby becomes a primary source of disease, we have no doubt; but that, far the greater number of changes that are met with, especially in chronic diseases, are produced by primary disordered action of some of the organs, we are equally certain. But it is no part of our present task to enter into an investigation of this subject. Although the work of Dr. Stillé does not possess that original and thoroughly-investigating character, which we had hoped to see, still it is a very useful and well-written compilation on the subject of general pathology. N. S. D.

Art. XII.—*On Bandaging, and other Operations of Minor Surgery.* By F. W. Sargent, M. D. Philadelphia, 1848. 12mo. pp. 379.

We cordially agree with the compiler of this useful and attractive little volume, that the subjects upon which it treats, are, in general, too much neglected in our courses of professional education both public and private. They are, as Dr. Sargent remarks, "but slightly alluded to in systematic courses of lectures;" and he might have added with equal propriety, they are not often so presented to the student in the office of his private preceptor, as to be of much practical avail.

Having ourselves had, for years past, abundant opportunity of testing the acquirements of students, as well as of recent graduates, we have no hesitation in stating, that, except among those who have enjoyed the advantages of an hospital education, it is an exceedingly rare circumstance to meet with a young man who knows any thing whatever of the important practical details to which this volume is devoted, and which, for want of a better name, are embraced under the general head of what has of late been called minor surgery.

These subjects, so ably described and handsomely illustrated in the work before us, should, for at least some portion of the time of pupilage, be so presented to the student as to occupy the major, and not the minor, place in his surgical studies and reflections. A thorough and familiar acquaintance with them will be of great advantage to him in the earlier years of his professional career; and of greater benefit to the community in which he may be called to practice for the whole of his life, than the most consummate skill in the use of the scalpel. The mere cutting part of surgery, after due preparation in the dissecting room, and now and then without this, may be readily picked up; its specious advantages are always more than sufficient to commend it to the attention of the young practitioner; and it is often possessed by individuals of little or no professional skill in other respects. But no one can be an accomplished dresser, or master of all the details of minor surgery, who is not, at the same time, a good general practitioner.

These details, then, should not be left, as they usually are, to be picked up incidentally. The student should be regularly drilled upon them. For, if he has not mastered them before the period of graduation, he rarely, if ever, afterwards masters them at all. We could adduce many instances in confirmation of this remark; and point to more than one among those who are considered to be sapient fathers of the profession, who, in regard to these details, have evinced a degree of ignorance, which if shown in an hospital dresser of three months' standing, would have been considered highly culpable, or would have for ever afterwards consigned him to the jeers and ridicule of his associates.

In collecting the materials of this volume, Dr. Sargent has made judicious use of most of the works of other surgical writers, that could in any way contribute to the fulfilment of his design, or render his book useful and attractive to the student. Originality, of course, was not to be expected ; and has not been attempted. But the mass of materials which are here presented to us, so arranged and systematized as to be of easy reference, is not the less worthy of attention on that account.

The book is divided into five parts. The first part treats of the instruments and materials usually brought into requisition in the various manipulations of minor surgery.

The second part treats of the preparation of bandages, of their application to different parts of the body, and of the several purposes for which they are employed.

The third part is taken up with a full account of all that relates to the apparatus employed in the treatment of fractures ; and in describing the various kinds of splints at present in use, or that have recently been recommended. These chapters are worthy of special attention.

The fourth part treats of the mechanical means employed in the reduction of dislocations, and of the modes of applying them.

The fifth part is devoted to what is more especially included under the head of the " operations" of minor surgery, and to other topics therewith associated.

The woodcuts illustrating the whole of these subjects have been selected from the best sources. They are well executed, amount to not fewer than 127, and present one of the most important features in the general plan of the work.

We must conclude this brief sketch by returning our thanks to Dr. Sargent for the trouble he has been at in preparing this useful volume for the benefit of the surgical student. We will adopt it as the text-book for the use of our own pupils, and we must recommend our fellow practitioners in all parts of this country to do likewise.
J. W.

BIBLIOGRAPHICAL NOTICES.

A Dictionary of Practical Medicine ; comprising General Pathology, the Nature and Treatment of Diseases, Morbid Structures, &c. By JAMES COPLAND, M. D., F. R. S. Edited with Additions. By CHARLES A. LEE, M. D. Parts XVIII. and XIX. New-York : Harper & Brothers. 1848.

WE have received from the publishers Nos. XVIII. and XIX. of this valuable publication. No. XVIII. contains a continuation of the article on the diseases of the peritoneum, and a very elaborate and finished article on pestilence in its various forms and phases, to which is added an able and exceedingly interesting Appendix by the American editor, from the pen of Dr. P. S. Townsend, on yellow fever, and the diseases of the American army in Mexico, &c., during the year 1847. No. XIX., an article on phlegmasia alba dolens, pityriasis, diseases of the pleura, pleurodynia, pneumothorax, and an unfinished article on poisons. If we may be allowed to judge from the author's *general observations* on this subject, what the remainder of the article, devoted to the considerations of particular poisons, will be, we hesitate not to say, that it will be one of the most complete, and yet concise monographs that English medical literature furnishes.

A Dispensatory and Therapeutical Remembrancer; comprising the entire lists of Materia Medica, Preparations and Compounds, with a full and distinct Version of every practical Formula, as authorized by the London, Edinburgh and Dublin Royal College of Physicians, in the latest editions of their several Pharmacopœias; to which are subjoined copious relative tables, exemplifying approved forms under which compatible medicines, &c., may be extemporaneously combined, &c., &c., &c. By JOHN MAYNE, M. D., L. R. C. S., Edinburgh. Revised; with the addition of the Formula of the United States Pharmacopœia, &c. By R. EGGLESFIELD GRIFFITH, M. D., Author of "Medical Botany," &c. 12mo., pp. 329. Lea & Blanchard: Philadelphia. 1848.

THE voluminous title of this little book clearly expresses the design of the work. In regard to the necessity of such a publication at the present time, the author, in his preface, thus expresses himself: "In the prosecution of his task, the author has been encouraged by the firmest persuasion that a *Ready Reckoner* of the present kind was greatly desiderated." How far the profession will recognise the necessity remains to be seen; for our own part, we think it well adapted to the end designed. The additions by the American editor include the formulæ of the United States Pharmacopœia, which adds much to the value of the work as a reference for the American practitioner.

Botany of the United States, north of Virginia; comprising Descriptions of the Flowering and Fern-like Plants hitherto found in those States, arranged according to the Natural System. With a Synopsis of the Genera, according to the Linnæan System; a Sketch of the Rudiments of Botany, and a Glossary of Terms. By LEWIS C. BECK, M. D., Professor of Chemistry and Natural History in Rutgers College, New Jersey, &c., &c. Second edition, Revised and Enlarged. 12mo., large, pp. 480. New-York: Harper & Brothers. 1848.

BY the preface of this work we learn, that "this volume is intended as a class-book for the beginner, and a convenient manual for the more advanced botanist." We think both these ends admirably accomplished. Many parts of the work have been entirely re-written, and almost every page amended, in order that it may present a succinct view of the present improved state of botanical science. Yet the original plan of the work, as observed in the former edition, has been carried out in this. The works of Lindley, De Candolle, Torrey and Grey, Darlington and various local catalogues have been freely consulted.

To the botanical student, and also the practical botanist, this work of Dr. Beck's can but prove of great assistance. The merit it possesses will, we have not the least doubt, obtain for it that favorable reception which so clearly marked the former edition. We warmly commend it to the attention of both teacher and student of botanical science.

Loiterings in Europe, or Sketches of Travel in France, Belgium, Switzerland, Italy, Austria, Prussia, Great Britain and Ireland, with an Appendix containing Observations on European Charities and Medical Institutions. By JOHN W. CORSON, M. D. 12mo., pp. 397. New-York: Harper & Brothers. 1848.

THIS is a very amusing little volume. It contains many pretty sayings which will please the reader much. The work contains forty-nine chapters, devoted to the non-professional observations of the author. An appendix containing two lectures on European charities and poor; and a letter on foreign hospitals and schools of medicines. It is not, however, a work which even admits of an analysis in our pages. Still, after all, we cannot say that we admire the taste which leads to the making of books of this class. We see no good reason why a medical man should collect his non-professional fugitive correspondence from a newspaper, and even with additions, republish it in the book form, to the public at large, under his personal cognomen. The motives, however pure, are open for question. Works of a medical character, devoted to the consideration of medical topics, and intended principally for the profession, when appearing under circumstances much like the present, we cannot but admire. The redeeming character of the present work, in a professional point of view, we find in the Appendix; the perusal of which will, we have no doubt, prove interesting and instructive to the medical reader.

PART THIRD.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

A Card.—Owing to a pressure of other engagements the connection of the subscriber with the Editorial Department of the New-York Journal of Medicine and the Collateral Sciences, ceased with the last (May) number. In retiring from a position which he did not seek, and which he reluctantly consented to occupy—one, moreover, which has brought with it more of care and responsibility than he anticipated, he would do injustice to his feelings did he not embrace the opportunity of expressing his gratitude to those who have aided by their communications, or in any way contributed to sustain the interest of the work while under his charge. Whatever may have been his failings, and he doubts not they have been numerous, he can only say, that he has at all times endeavored to lose sight of private and personal interests, and consult those only which pertain to the profession and the public generally. He has aimed to support the rights, the dignity, and the interests of that noble profession, of which he is an humble member, and if the measures he has advocated do not contribute to that result, it is an error of judgment which he trusts is venial. Knowing its impossibility, he acknowledges he has never aimed to please all, and had he succeeded in doing so, he would have forfeited his own self-respect, as well as that of those whose good opinion is of any real value. If he has not done all that was expected, he has done what he could, *non omnia, possumus omnes*. On reviewing his Editorial labors, therefore, while he find some things to regret, he sees no especial reasons for doing penance. He claims to have carried out the programme and abided by the platform which he laid down when he first took possession of the Editorial chair. That his efforts have not been altogether unsuccessful is proved by the constantly increasing list of subscribers, which has nearly doubled during the last year. Of the standing and reputation of the Journal, both at home and abroad, it does not become him to speak; suffice it to say, that they are entirely satisfactory to its friends and its proprietors. While, then, he hands over the work and the hard-earned results of his experience to his successor, he can only express the hope that it may long continue to flourish and contribute in a good degree in advancing the interests of science and humanity.

CHARLES A. LEE.

[For the publisher's notice in relation to the future management of the Journal, see Notice to Readers and Correspondents.]

CROUP, OR LARYNGITIS MEMBRANACEA, TREATED BY THE USE OF ARGENTI NITRAS.—The topical application of nitrate of silver to the glottis and larynx in this affection, has already acquired something of a professional notoriety. Within a few months past eight cases* have been reported in the different Medical Journals and transactions of Societies, and two have been related to us, the authenticity of which we can vouch for—in all of which recovery has taken place. It is no more than justice, however, to state, that in some of these cases the use of the nitrate was not alone depended upon. Antiphlogistic treatment in four cases, consisting of the use of repeated doses of calomel, and the occasional exhibition of antimony, in some form, sufficient to produce nausea was, during some period of the affection, resorted to. The recovery of ten cases of genuine croup (as they all claimed to have been) under one plan of treatment, is a new feature in the therapeutics of this disease, and should at once claim the attention of the profession.

It appears from a review of the history of these cases that the disease was confined to the *tonsils, glottis* and *larynx*. In all cases when the inflammation is confined to these parts, we deem the treatment not only feasible but justifiable from the first. But in cases where by extension the trachea, bronchia and lungs are implicated, like the operation for tracheotomy, but little if any good can result from its use. Believing as we do that the pathology of this affection consists in inflammation, primarily seated about the epiglottis or in the larynx—tracheitis and bronchitis being secondary complications, our readers will readily recognise the propriety of early resorting to the treatment, which the success of these cases warrants us in recommending to their consideration. These therapeutic indications are still further confirmed by the recognition of the general law enunciated by Hasse, in his Anatomical Description of the Diseases of the Organs of Circulation and Respiration, viz., "Exudatory inflammation, appears in the respiratory passages, to spread invariably from above downwards, never in the opposite direction." Failing to resort to it early and thus not to recognise the light thrown upon the treatment of this almost universally fatal malady, by the recent investigations in pathology, we have not the least doubt that the treatment of membraneous laryngitis, or croup, by a strong solution of the nitrate of silver will fail in success as frequently as tracheotomy did in the hands of M. A musat, Blandin, Roux and Baudelocque. The judicious physician will readily see the propriety of conjoining appropriate antiphlogistic treatment, which must be adapted to the exigencies of individual cases in order to secure, we apprehend, the greatest possible success.*

---

* Two cases by Dr. W. N. Blakeman, *vide* this Journal, Vol. 8, p. 209. One by Dr. T. R. Varick, *vide* this Journal, Vol. 10, p. 72. One by Dr. C. E. Ware, in Boston Med. & Surg. Jour., Vol. 37. One by Dr. A. C. Post, in Rep. Proc. of N. Y. Med. & Surg. Soc., *vide* Annalist, Vol. 2, p. 285. One by Dr. P. Van Buren, in Trans. of N. Y. State Med. Soc., 1848, Appendix, p. 68. One by Dr. S. Bryan, in Medical Examiner, June, 1848, p. 342. One by Dr. Aldrich, in Boston Med. & Surg. Journal, Vol. 38, p. 94.

ADULTERATION OF MEDICINES, AND THE LATE ACT OF CONGRESS. —Since the publication of our last number, the memorial which was first drawn up by the College of Pharmacy of this city, and seconded by almost every medical association in the country, has resulted in the passage of a law regulating the importation of drugs and medicines. Great credit is due the College for its untiring and united action in this matter, and we are extremely gratified that we are able to present the readers of the Journal, with extracts from the able report of the select committee of the House of Representatives, "On Imported Adulterated Drugs and Medicines, &c." We only regret that want of room prevents us from giving it entire. For a number of years past, and particularly of late, it will be remembered, that strenuous exertions have been made by physicians and apothecaries, through their respective societies, as well as many of the medical journals, (of which we humbly claim to be one of, *if not the first*,) to bring this matter before Congress for some action by which the *base*, inhuman and *unholy* trifling with the health and lives of our fellow-citizens, might be put a stop to. Our hearty thanks, as a profession, as well as those of the public, are due to the representatives of the thirtieth Congress, for the late interposition of the strong arm of the law. Men whose *total depravity* is so great that they feel "justified" in importing and selling for home consumption, inferior or adulterated medicines, we have no fellowship for, and we rejoice that the time has come, when the majesty of the law has arisen to confound and condemn them. But, while we mingle our congratulations with those of the profession and the community, we must not forget to mete out the meed of praise due those, to whose immediate instrumentality we are indebted for all this. The part taken, and interest manifested in this matter, by Hon R. J. Walker, Secretary of the Treasury, commands our warmest thanks. Almost the first step taken to furnish facts and data, by which this matter could be more effectually brought before congress, was made by this gentleman, in the appointment of a member of the profession, of capability and trust, the indefatigable M. J. Bailey, M. D., to take charge of this branch of customs at this port. How far the facts elicited by the latter gentleman, aided the chairman of the select committee, and influenced the decision of Congress, may be easily seen by reference to the report, extracts from which we have made. To Hon. Thomas O. Edwards, M. D., chairman of the select committee and author of the report, whose zeal and devotion never appeared more conspicuous, and who in the discharge of the important duties incident to such an appointment, labored incessantly and arduously until the end was honorably and legitimately attained by the passage of the act, are the profession deeply indebted. Those only who know and, have seen, can fully comprehend the talent, time and perseverance necessary to secure the passage of a law like the present. Dr. Edwards, in this "labor of love," has proved himself a bold and successful champion of the rights of the medical profession. To Senator Dix and others of that distinguished body, as well as to congress generally, are the profession, as well as the public, indebted for the prompt and almost unprecedented manner in which this most important measure was met and successfully disposed of. We are pleased to learn that Dr. Bailey, who rendered such essential service to Dr. Edwards, has been appointed examiner for the port of New-York. This we conceive but an act of justice, and we can but believe that his watchfulness and impartiality will only be equalled by the zeal he has manifested for the interests of our common profession. Under the head of Materia Medica and Pharmacy will be found extracts from the report of the committee, and the act of congress relating to spurious and impure drugs.

---

* Great care should be observed in selecting a pure article of the nitrate of silver—the crystals are to be preferred. In the cases reported, the strength of the solution varied, according to the age of the patient, from forty to sixty grains to the ounce of water. The sponge should be soft, conical and securely attached to the whalebone, which may be made of the desired curve by placing it in hot water for a few moments and then holding it in the fingers, for a short time, bent according to the shape wished until it becomes set.

ANCIENT MONUMENTS OF THE MISSISSIPPI VALLEY.—We have been politely favored by Drs. E. G. Squier and E. H. Davis, the authors of this splendid and original work, with a copy of the proof-sheets, amounting to over 300 pages, imperial quarto, and illustrated with beautifully-executed wood-cuts, representing in a graphic manner the antiquities therein described. When completed, we are informed, it will comprise not far from 600 pages of letter press, illustrated by upwards of 50 quarto plates and more than 200 engravings on wood, all executed in the best style of the art. It will include plans, from actual surveys, of more than one hundred and fifty ancient earth and stone works, with plans, sections and views, illustrative of the present appearance, position, structure, contents and purposes, of the several varieties of aboriginal mounds and pyramids, together with the implements, weapons, ornaments, sculptures, &c., found in the mounds.

This great work, which constitutes the first volume of the "Smithsonian Contributions to Knowledge," and published at the expense of that Institution, is the result of the joint labors of two most worthy members of our profession, and is alike honorable to them and our common country. That it is the most important addition yet made to American Archæology is conceded by those who have had an opportunity of examining the works, such as Dr. Morton, Prof. Ed. Robinson, G. P. Marsh, P. R. Bartlett, &c. We regret that our limits in the present number do not permit us to give a more detailed account of its contents; we can only commend it to our readers and the profession generally, as in the highest degree worthy of their patronage.

PATHOLOGY AND PRACTICAL MEDICINE.

ON THE ENDEMIC GASTRO-FOLLICULAR ENTERITIS, OR "SUMMER COMPLAINT" OF CHILDREN AS IT PREVAILS IN THE UNITED STATES. By *Edward Hallowell*, M. D., Fellow of the College of Physicians of Philadelphia, Member of the Academy of Natural Sciences, &c.

The following article on cholera infantum, from the American Journal of Medical Science for July, 1847, we have thought of sufficient interest to be given entire. In making our selections from the domestic or foreign medical press, we wish not to be understood as endorsing thereby the views of the writer of the article selected.

At this season of the year when the gastro-intestinal canal of children is particularly prone to diseases of a severe and frequently fatal character, we have thought that we could not devote a few pages of the Journal more appropriately than to the subject on which this article treats.

It is believed that the analysis of the treatment given by the writer for the several stages of the disease will be found successful; but his views in regard to some points of its pathology admit of doubt. *The cases contained in the article we are compelled to omit.*

Cholera infantum, or the "summer complaint" of children, has been considered peculiar to the United States. Billard, in his diseases of infants, alludes to its occasional appearance in Paris. In the United States it prevails to a great extent, and the mortality from it is extreme. It occurs in all our large cities, carrying off several thousand children annually; it commences in the Southern States in May, and in the Middle and Western, about the beginning or middle of June, and continues until near October, the greater number of cases being observed in July and August. It is found chiefly in the lanes and alleys of our large cities among the poorer classes of society, but those in the higher ranks are by no means exempt from its attacks. It is stated by Dr. Condie, that during a period of fifteen years, from 1825 to 1839 inclusive, 3352 infants perished of this disease in Philadelphia, being almost ten per cent. of the whole number of infants under five years who died during that period. In St. Louis, Mo., during the years 1841, 1842, and 1843, 238 children died of it. In 1823, 253 died of the same complaint in Baltimore. The average number of deaths annually in Philadelphia is about 200. The disease is confined almost exclusively to children between four and twenty months of age; cases, however, occur as early as the age of two months, and as late a period as three or five years.

Causes of the Disease.—Cholera infantum is considered to be dependent for its production upon a heated, confined, and impure atmosphere, acting "directly upon the skin, and indirectly upon the mucous surface, at a period when the latter is already strongly disposed to the disease from the effects of dentition, and from the increased development and activity of the muciparous follicles which take place at that period." The circumstances of its origin, however, are involved in doubt, and can only be determined by future and more correct observation. The exciting causes are stated by Dr. Dewees to be improprieties in diet and clothing. He observes, also, that it is very often aggravated by worms, but such a complication has not come under our notice.

General Description of the Disease.—Cholera infantum may be divided into three stages, based upon its anatomical characters. In their description we shall be guided chiefly by the results of our own observations.

Symptoms of the First Stage.—This usually commences with diarrhœa, succeeded by vomiting, or with vomiting and purging; these symptoms are soon followed by fever of a remittent type, with evening exacerbations; the pulse is small, quick and frequent, occasionally full, and sometimes tense; the brain is often affected sympathetically; this condition is manifested by a tendency to delirium; the eyes have a fierce and wild expression, and the face is flushed; the stools in this stage vary much in consistence; at times they are thin and watery, but often pasty or mush-like; their color also differs greatly in the course of the day, and from one day to another; in a number of cases they presented the appearance of chopped egg, upon which boiling water had been poured; occasionally they consisted almost entirely of mucus. The period at which the vomiting is observed varies; it occurs usually on the second, but often as late as the fourth or fifth day; in some instances there is no vomiting throughout the course of the disease; in one case it did not make its appearance until a few days before death; the matter vomited consisted of the contents of the stomach, which were returned almost immediately after their entrance into it; in infants at the breast the milk was returned in a curdled state, having an acid smell; in one instance it had the appearance of coffee grounds; the vomiting occurred for the most part three or four times a day, and sometimes oftener.

Temperature of Surface.—The skin was occasionally moist, more frequently dry, warmer upon the head and abdomen; the latter is mostly warmer than the rest of the body, and often decidedly hot; the temperature of the extremities is natural, or more generally cool; occasionally it is warm; sometimes the lower extremities are cool while the upper retain their usual heat. The *respiration*, except in those cases complicated with other diseases, as whooping-cough or measles, was free, with the number of respirations in the course of a minute amounting to 20, 24, 28, 29, 30, 33, 36, 40, 44, 48, 53, 55 56, 60, 64, 66. When over 30 the respiration was more or less interrupted. The *tongue* in this stage was observed to be moist, but was often red at its tip and edges, and coated at its base with a yellowish or brownish yellow fur.

The *countenance* in the early stage, except when the attack was violent, was good, the eyes being bright and animated; occasionally the child would fall into a sleep from which it was easily roused. There was usually a considerable degeee of irritablity and restlessness, the little sufferer being pacified with difficulty. The sleep was often disturbed. The abdomen was occasionally tense and tumid, and somewhat painful on pressure; the thirst was often intense; it now and then happened, however, that drink was refused.

Anatomical Characters.—These consist in an undue development of the follicles both of the stomach and intestines, or of one of those organs, without inflammation of the mucous membrane. Children rarely die of cholera in the early stage; opportunities, therefore, seldom occur of observing the morbid appearances. M. Billard, who had ample opportunities for the study of the diseases of children at the Hôpital des Enfans Trouvés of Paris, states that he had seen isolated follicles and follicular plexuses of the intestinal tube in considerable numbers and developed without being inflamed in twelve infants; three were aged from eight days to three weeks, two aged two months, the remaining seven were from nine months to one year; the symptoms of the cases he has published correspond so closely with those of cholera infantum, that, to use the language of Dr. Horner, it is evident that had they occurred in this country, they would have been named, and in fact are, cases of cholera infantum. M. Billard states, that most of these children had arrived at the period of dentition, so that there appeared to be a remarkable coincidence between the appearance of the teeth, and that of the organic development of the follicular apparatus of the intestines, the follicles performing an active part in the process of digestion by furnishing the surface of these organs with a fluid which, in all probability assists in the elaboration of food. Dogs, he observes, and other carniverous animals remarkable for their digestive powers, possess this apparatus in a high degree of development. In a lioness which died in this city some years ago, and of which I had the opportunity of making a post-mortem examination, the isolated follicles of the intestines were one-fifth of an inch in diameter.

The follicles are sometimes found to exist in great numbers from the first period of life, but in general they are not very numerously developed, except at the period above mentioned, or at a still more advanced age. (Billard.) Rœderer and Wagler, in their work *De Morbo Mucoso*, in which they describe the symptoms and anatomical characters of a gastro-follicular enteritis that prevailed in Gottingen in 1760 and 1761, give very beautiful and accurate drawings of the mucous follicles in a state of abnormal development.

The muciparous glands of the mucous membrane are, it is known, of two kinds, the isolated and the agminated. The isolated follicles are found both in the stomach and intestines, but are much more abundant and less uniformly developed in the former than in the latter; the agminated follicles or glands of Peyer occupy the free border of the intestine; these are rarely affected in cholera infantum. The isolated follicles are found less abundantly in the jejunum, than in the other portions of the small intestine. They are usually about the size of a pin's head, and have not inaptly been compared by Dr. Horner to grains of sand sprinkled over the surface of the intestines. They are elevated above the surrounding surface of the membrane, and have each in their centre a small grayish point. They consist simply of a duplicature of the mucous membrane, and are readily effaced by passing the handle of the scalpel over them with some force; on cutting them open they are found to contain a small quantity of fluid. These glands receive each, according to Leiberkuhun, Meckel and Beclard, an artery, a vein and a nerve. They occupy both the summit and the interstices of the valvulæ conniventes, and are found disseminated over every part of the intestine, both upon the free and attached surface. (See case of Charles Morand, in Billard, *Maladies des Enfans*, and of Marie Boulefray, in the work of the same author, entitled "*De la Membrane Muqueuse gastro-intestinale dans l'état sain et dans l'état inflammatoire, researches d'anatomie pathologique sur ses divers aspects sains et morbids.*" Paris, 1825.)

"*Treatment.*—We have thought it proper to intercalate with our own, the opinions of older and more experienced members of the profession, more especially those of Dr. Chapman, Professor of Practice in the University of Pennsylvania. His acute perception of *symptoms*, appears to have impressed him more fully than most others with the importance of dep'etory measures in the treatment of this disease. *Preventive means.*—In the beginning of June examine the condition of the gums of the child, and if swollen, lance them and send it into the country. A part of the country should be chosen which is elevated, where the air is pure and dry, and where there are no large streams nor stagnant water. Chestnut Hill, in the vicinity of Philadelphia, offers superior advantages in this respect. If it be impossible to remove the child to the country, especially if the apartments of its dwelling be not fully and freely ventillated, let it be carried into the open squares of the city, or taken frequently across the Delaware in the afternoon. The sleeping apartments of children should be large and well-aired. They should sleep upon a mattress or blanket folded upon the floor of the room or crib, and the covering should be light; they should be immersed in a cold bath at least once a day, or be freely sponged in cold water; the mortality among the children of Philadelphia is said to have greatly diminished since the introduction of the Schuylkill water; the child should be confined to the mother's breast, care being taken not to overload the stomach, indeed itoften happens that the breast is given to the child when it requires only drink; the stomach then becomes distended and vomiting often ensues. Attention during the first year should be paid to the diet of the mother; she should avoid articles of a flatulent or indigestible character. Dr. Parrish recommends as a preventive means, when predisposition to cholera is suspected, the occasional use of nutritious animal fluids; the sucking of small pieces of salt meat, as ham or dried beef, he observes, will sometimes be found productive of advantage. With the same view of giving tone to the stomach, he recommends that aromatics, as ginger tea, be used habitually during the summer, in those cases in which there is strong reason to apprehend the occurrence of cholera. This treatment may possibly be applicable under certain circumstances, as in the case recorded by him, but as a general rule we are not disposed to recommend it. Indeed, he himself observes, that it is applicable in all its details only in those in whom there is every reason to apprehend that the only altenative is between almost certain death and the most careful prophylactic treatment.

Treatment of the First Stage.—We have seen that the first stage consists chiefly in an abnormal development of the mucous follicles of the stomach and intestines. This, as observed by M. Billard, is not properly speaking, true inflammation, being rather an intermediate stage between the normal state, and the state of inflammation. The follicles are simply in an excited condition, induced as there is reason to suppose, by the powerful influence of heat combined with malaria, acting upon the nervous system. The object of treatment, therefore, is to subdue this excited condition, and to restore the healthy state of the skin with which, and the mucous lining of the alimentary canal, there is a powerful sympathy. The functions of the liver, it is probable, are more or less impaired, but of this we have no direct evidence. If the child be not weaned, it should be confined to the mother's breast, care being taken to avoid overloading the stomach, thus adding to the irritation which already exists. If weaned, it should be confined to milk and water, rice, barley, gum, or toast-water. The infusion of the benne leaf, (*sesamum orientale*,) is also employed in this city, and is a useful remedy. The gums should be carefully examined and lanced if swollen. The most important point of treatment, however, is early removal to the pure air of the country. This should be done as soon as the disease has declared itself. Dr. G. B. Wood, Professor of Materia Medica and Pharmacy in the University of Pennsylvania, states, that during the whole period of his practice, (nearly thirty years,) but one case occurred to him, so far as he can recollect, of a fatal termination of this disease, when the child had been sent into the country in the early stage of it. (Pract. of Med., vol. i. p. 673.)

Blisters behind the ears have been highly recommended at this period of the disease, and we believe the practice is attended with decided advantage. Dr. Parrish was the first to suggest them. They should be applied immediately. The advantage arising from the early application of blisters behind the ears is confirmed by the late Dr. Eberle, a distinguished practitioner of this city, favorably known by his writings on the management of children. He observes, "during the last seven years, I have treated but few cases in which I have not at once applied blisters behind the ears, and I may confidently affirm, that since I have adopted this practice, I have been much more successful in the management of the disease than formerly. Their good effects arise, no doubt, from the counter-irritation they produce." The warm bath should be administered every night and morning, and the child on coming out be gently rubbed with a piece of soft flannel; should there be much cutaneous sensibility, a portion of salt and mustard may be added to it. With a view of allaying the vomiting, various remedies have been employed. Injections of salt and water have been recommended by Dr. Dewees. Lime-water and milk, and the neutral mixture may be used for this purpose. Dr. Chapman states that he has found the irritability of the stomach most effectually allayed by lemonade in doses of a teaspoonful frequently repeated. It should be made pretty sour. Great advantage may also be derived from the frequent use of Seltzer or soda water. Dr. Parrish was in the habit of recommending it to be put up in ℥ss phials, the contents of one of which to be given at a draught. The soda powders may also be employed. Chicken-water was also directed with the same view. Stimulants, as strong coffee, sulphuric ether, turpentine, &c., are objectionable. Dr. Condie states, that when the irritability of the stomach has been excessive he has rarely failed in allaying it by the administration of the acetate of lead, in solution according to the following formula. ℞.—Aq. puræ ℥j; acet. plumb. grs. v; acid acet. impure. m. v; sacch. alb. pur. ʒiij. Sig. A teaspoonful may be given every hour or two until the vomiting be suspended. We have been in the habit of directing the blue mass mixed up with gum arabic, with a view of overcoming the irritable condition of the stomach, and usually with success, or small doses of calomel, (1-12th of a grain every two or three hours, either alone or in combination with a very minute quantity of opium, 1-16th, 1-20th, 1-30th, 1-40th of a grain.) The blue mass may be given as follows: ℞—Mass. ex hydrarg. grs. iv; g. acaciæ pulv.; sacch. alb., āā ℥ss; aq. ℥iss. M. Sig. A teaspoonful every hour.

If the vomiting be obstinate, a Cayenne poultice or small blister may be applied to the epigastrium. Should the disease continue, we next have recourse to small doses of calomel and ipecacuanha in doses from 1-12 to 1-6 of a grain of the former, and from $\frac{1}{4}$ to $\frac{1}{2}$ a grain of the latter, every two or three hours; advantage may sometimes be derived from substituting a small quantity of Dover's powders, (from $\frac{1}{4}$ to $\frac{1}{2}$ a grain,) for the ipecacuanha. We should be extremely cautious, however, in the use of opiates in this, or indeed in any stage of cholera infantum. Benefit may be also derived from the application of a bread and milk, or mustard poultice over the whole abdomen, or as advised by Dr. Eberle, a poultice composed of two or three tablespoonfuls of powdered black pepper, with a few teaspoonfuls of Cayenne mixed up with a common poultice. Embrocations to the abdomen and the lower extremities, with spirits of camphor, may also be used with advantage. Should there be symptoms of acidity, which may be ascertained by testing the stools with litmus paper, a few grains of magnesia may be given, and should the discharges continue so as greatly to debilitate the patient, two or three grains of prepared chalk may be added to the prescription of calomel and ipecacuanha. We cannot, however, protest too strongly against the injudicious use of astringents in this or any other stage of the disease. We once witnessed a case in which cerebral symptoms of an alarming character supervened in consequence of a sudden arrest of the alvine discharges by means of the chalk mixture, and the child's life became a forfeit.

Second stage—The vomiting which, in the commencement, was more or less frequent, now occurs but seldom, while the diarrhœa continues; the stools vary much in appearance, but are more or less bloody and painful: there is also much restlessness, and the child is observed to draw up its limbs at the time of the discharge; the predominating color of the stools is dark green, looking like chopped spinach; the color, however, is occasionally lighter, but mixed with portions of a darker hue, or with lumps of yellow more or less curdled. They are often of a bright yellow or chrome color, or of a dark brown or chocolate color, caused by the admixture of grumous blood. The appearance of the stools varies much in the course of the day, the change of color probably depending upon the greater or less quantity of bile and acid in the intestines; the abdomen is more or less tumid and painful on pressure; tenderness of the abdomen, with drawing up of the limbs, and bloody discharges are the most important signs in this stage of the affection; the temperature of the abdomen is usually elevated, while that of the extremities is cool; the pulse is small and feeble, or it is frequent and tense; occasionally it is intermittent; as the disease advances, the emaciation already observed progresses, the skin about the neck and thighs hanging in folds; the eyes become sunken in the orbit, and each is surrounded by a dark areola; the nose is sharp, and the lips are shrivelled; the feet become œdematous, and the cutaneous sensibility is so much impaired that flies collect upon the face without causing any uneasiness; petechiæ are occasionally observed at this period; the tongue is dry and incrusted and covered with aphthæ, and deglutition is now more or less painful; the child is often observed to thrust its fingers far back into the mouth from dryness of the fauces; the appetite becomes greatly impaired, and there is almost constant thirst. Dr. Dewees mentions the eruption of a quantity of minute vesicles upon the chest, which he considers a fatal sign. Dr. Condie states that he has known many instances of recovery, even when the eruption has been most extensive and distinct. We have observed it but in a single instance; the eruption, however, was not confined to the chest, but occurred in other parts of the body. Dr. Chapman speaks of the appearance of pink-colored stools as a fatal symptom; this does not correspond with our own observations.

Anatomical characters of the second stage.—These consist essentially in inflammation with softening of the mucous membrane and ulceration of the follicles, more especially of the large intestine. The mucous membrane of the stomach in many case presents its usual appearance and consistence; in others it is more or less injected and softened, the softening extending occasionally to all the coats, resembling the condition described by Cruveilhier as characteristic of the disease termed by him *maladie gastro-intestinale des enfans*, and by Jæger, Gairdner, and others, softening of the stomach.

Rilliet and Barthez in their work on the diseases of children, notice the correspondence between the symptoms of softening of the stomach as described by Jæger, and those of cholera infantum; but an examination of the cases recorded in this paper will show that this condition of the organ is but rarely observed. The lining membrane of the stomach is not unfrequently covered with a layer of whitish opaque mucus easily scraped off with the handle of the scalpel; the mucous follicles both of the stomach and intestines are more or less apparent; the mucous membrane of the small intestine is occasionally softened, and for the most part pale in the greater portion of its extent, contrary to the statement of Dewees and others, who consider the small intestine as being the exclusive seat of the disease. In one case the portion of intestine inflamed, (the lower portion of the ileum,) presented a brick-dust color interrupted with alternations of a pale yellow, mottled with red in some points; minute vessels were seen freely inosculating with each other; in other portions the inosculations were less distinct, there being a uniform reddish tinge. In another it was of a dull red, or brick-dust color, minutely injected with red vessels, and in several points, especially upon the surface of the valvulæ conniventes, presented a dotted appearance; it occupied a portion of the intestines four inches in extent from the pylorus. In another case, the duodenum at its upper portion presented a slight shade of pink, with a few minute arborizations, and in several other instances there was a slight degree of inflammation affecting the duodenum at its upper extremity. There was also a slight inflammation of the glands of Peyer in one or two cases, but for the most part they presented nothing remarkable. The small intestines contained a considerable quantity of orange-colored mucus. The large intestine was more or less inflamed and softened in almost every instance; the inflammation existed in the form of bands, and presented a dotted arborescent appearance; in one case these bands were longitudinal: they were five or six inches in length, and several lines in breadth; in another case the bands were about two inches in length, having a minutely arboriform appearance, and were of a deeper red than the surrounding membrane; the first was situated one and a half inches from the cœcum, the second six inches from the first, and extended nearly the whole circumference of the gut; it was three inches in length and very minutely injected, but not so much as to destroy the arboriform arrangement. In most of the cases the redness was diffused with occasional ramifications; in one instance the inflammation occupied the whole extent of the colon; it was of a vivid red throughout, and the membrane was much thickened. The inflammation was here also for the most part diffused, or in the form of bands occasionally presenting a ramiform appearance, the minute vessels freely inosculating with each other. From the margin of the follicles minute vessels were seen to radiate to the surrounding membrane, occupying the entire surface of the intestine, showing that the inflammation commenced in the follicles and extended subsequently to the mucous membrane. The follicles were often found to be more or less ulcerated, the ulcerations sometimes extending as far as the muscular coat; the ulcerations were more numerous and penetrated more deeply in the rectum than in other portions of the intestine; it was often completely riddled with them; we have not observed the surrounding membrane to be implicated to any extent; the mucous membrane was more or less softened in the greater number of cases; in one instance it was thickened; the membrane in this case was intensely inflamed. The coats of the intestine were covered with a layer of mucus, sometimes so thick as to diminish considerably its calibre. It ordinarily contained a quantity of grayish-colored fæces of the consistence of gruel. The lungs presented nothing remarkable but a slight engorgement posteriorly, except in three cases, one of which was complicated with measles, and the remaining two with whooping-cough; in these cases the usual appearance of lobular pneumonia was present. In one case the patient had been attacked with pleurisy in consequence of exposure to the night air; at the autopsy a considerable quantity of pus was found effused in the cavity of the right pleura, and the lung was more or less disorganized. The peritoneum presented its usual healthy color in all the cases observed; the liver was greatly enlarged in but a single instance, contrary to the statements of most authors who affirm this to be uniformly the case, the gall-bladder was more or less distended with dark-colored bile staining the finger a deep yellow; the mesenteric glands were not enlarged; the spleen and kidneys presented nothing remarkable. In nearly all the cases the veins of the pia-mater were more or less distended; the arachnoid was pale and moist, except in one case in which there was a slight opacity at the base of the brain; there was more or less effusion in the sub-arachnoid cellular tissue, for the most part limpid; occasionally it presented a whitish, opalescent or citron-colored appearance; the pia-mater was more or less injected, but the injection for the most part appears to have been confined to the larger ramifications; it was easily removed by traction from the surface of the brain; the substance of the brain presented its natural appearance except in two cases, in one of which the central, and in the other both the central and the cortical portions were injected; it was softened in four of the cases; there was little or no effusion in the ventricles; in one instance the lateral ventricles appeared to be quite dry, as if wiped with a cloth.

Treatment.—We have seen that the second stage is characterized chiefly by tenderness of the abdomen on pressure, drawing up of the limbs, and bloody stools, symptoms which depend upon inflammation of the mucous membrane, more especially of the large intestine. The treatment, therefore, in this stage should be antiphlogistic. There can be no doubt, we think, that the mortality from cholera infantum has arisen in a great degree from not keeping its inflammatory character sufficiently in view. We have found inflammation of the mucous membrane of the large intestine in every autopsy that we have made, and evidence of its existence in an advanced stage of the disease clearly demonstrated in all the published cases that have come under our observation.

The chief object of the present essay, indeed, is to direct the attention of the profession to the above fact, and to the importance of antiphlogistic treatment, instead of the purgative plan usually pursued and with such fatal results. When the abdomen is distended and painful on pressure, with a tense, frequent or full pulse, v. s. should be resorted to. This is occasionally required at the commencement of the first stage, when there is much cerebral determination; should v. s. not be sufficient to remove the inflammatory condition, or when the state of the pulse does not indicate it, leeches or cups are to be applied to the abdomen; we have not been in the habit of directing cups in this affection, but from the great benefit which we have seen result from their use in the lobular pneumonia of children, we have no hesitation in recommending their employment. Mothers naturally object to what they conceive to be a harsh remedy, but by persuasion they can generally be induced to submit to it, and the great advantage we have uniformly derived from their employment in the last-mentioned disease, we think warrants their use in this. The amount of pain is much less than is supposed, and the quantity of blood is more suddenly and effectually extracted than by leeches, besides which there is no risk of subsequent hemorrhage. One, two, three, or four cups may be applied to the abdomen, and repeated should pain on pressure or the bloody discharges continue. It should be remembered that the reaction in children is seldom great, and that the most intense inflammation of the mucous membrane may exist, while the temperature of the skin is but little elevated; or may be quite cool, and the pulse feeble. Stimulants in these cases are too often given, and may destroy the patient; the true course is to pursue a cautious antiphlogistic treatment, supporting the patient at the same time by the blandest articles of nourishment. It has been advised to apply leeches to the anus, and this may occasionally be done with advantage. Injections of cold water or iced water, as the severity of the case may require, are recommended by Dr. Miller of New York, and we believe with great propriety. The remedy, he observes, though generally advisable, appears to be best adapted to that period of disease when the alimentary canal has been previously well emptied of its acrid and offensive contents. Should there be reason to suppose the existence of such accumulations, the discharges being watery and mixed with indigestible food, with a tumid state of the abdomen, a grain of calomel may be given every hour or two until the bowels are disturbed. We have observed that the small intestines are but little affected in this disease, and we should think, therefore, that no objection could be made to the use of mild laxatives for this purpose, the treatment being the same as in dysentery. Castor oil, the oleaginous mixture in small doses, or the oil of butter, may also be employed. Injections of the liquor plumbi subacetat. dilut. (℥j to a gill of water) are also productive of benefit, or the acetate of lead, in the proportion of five grains to a gill of water, for a child of two years. The internal remedies should be small doses of calomel and ipecacuanha as prescribed in the first stage, or the same dose of calomel combined with $\frac{1}{4}$ to $\frac{1}{2}$ a grain of Dover's powder every three hours. It may often be advantageously associated with acetate of lead to the amount of from one-sixth to one-fourth of a grain, but we believe this remedy better adapted to a more advanced period of the disease. When there is much irritability, and the skin not perternaturally dry, the ext. hyoscyam. may be substituted for the Dover's powders. Emetics we consider decidedly objectionable in every stage of cholera infantum, notwithstanding that they have been recommended by high authority.

It will be observed that inflammation with ramollissement of the mucous membrane of the stomach, exists in a large proportion of cases, and emetics under such cases must be decidedly injurious. With regard to purgatives the same objection applies. *Laxatives* may occasionally be proper when there is reason to suspect the accumulation of irritating matters in the intestine, and of them the best, as above mentioned, is calomel either alone or in combination with a small quantity of Dover's powders ($\frac{1}{4}$ to $\frac{1}{2}$ of a grain,) and followed by a dose of castor oil. We cannot too strongly urge upon the young practitioner the necessity of caution in the use of opium in this disease, or indeed in any other in which there is a determination to the head. The warm bath is a useful remedy, unless the child be too debilitated; he should be immersed in it up to the neck, and cloths wrung out of cold water applied at the same time to the head, in order to lessen the determination to the brain. Should the application of cups or leeches to the abdomen not be sufficient to remove the inflammatory symptoms, and the pulse be feeble or the patient much exhausted, blisters may be resorted to, but great care should be exercised in their employment lest gangrene ensue. We have seen very troublesome consequences arise from the application of blisters to children, and in one instance we think the child lost its life from their imprudent use. They should never be suffered to remain more than three hours, and after their removal, a large emollient poultice should be applied over the whole abdomen. Should there be symptoms of cerebral congestion manifested by stupor, rolling about of the head, or a disposition to coma, cloths wrung out of cold water, or vinegar and water, or a mixture of equal parts of lead water and spirits of wine should be applied to the head. Should these symptoms continue, leeches in small numbers may be applied to the temples or behind the mastoid processes. Counter-irritation should also be made by stimulating pediluvia, or the application of sinapisms to the extremities.

Cholera infantum not unfrequently becomes chronic, the symptoms being very much the same as those of ordinary diarrhœa, or the patient may sink into a typhoid state. The remedies in this case consist of the warm bath, to which salt, mustard, brandy or Cayenne pepper may be added, counter irritating applications to the abdomen, and the internal use of mild astringents. When the diarrhœa is such as to exhaust the patient, the cretaceous preparations may be cautiously employed, great care being taken not to arrest the discharges too suddenly.

The following prescription has been proposed by Dr. Parrish for that purpose. ℞.—Potassæ sub-carb, ℈j; gum acaciæ, ʒj; tr. opii, gtt. vj; aq. cinnam. ℥iss; sacch. alb., ʒj. M. A teaspoonful to be taken every two or three hours. Should this not be sufficient, the following may be employed. ℞.—Test. ostrear. ppt., ʒiss; gum acaciæ, ʒj; tr. thebaic, gtt. x; sacch. alb., ʒj; aq. pur., vel aq. cinnam., ℥ iv. M. Sig. A teaspoonful every two hours.

Dr. Condie states, that he has derived great advantage from the use of charcoal in chronic cases of this affection, when the discharges were of a dark color, acrid and offensive. He employs it in combination with powdered rhubarb, ipecacuanha, the extract of hyoscyamus, according to the following prescription. ℞.—Carb. ligni, ʒj a ʒij; pulv. rhei, ℈ ij; ipecac. grs. iv a grs. xij. M. ft. chart. xij. Sig. One to be taken every three or four hours. Lime water and milk may also be given in these cases, also equal parts of charcoal and magnesia.

Care ought to be taken not to continue the use of the charcoal too long, as serious accidents are said to have arisen from its accumulation in the bowels. The infusion of soda and hickory ashes is also said to be beneficial. The syrup of rhubarb may be given in doses of from twenty drops to a teaspoonful every two or three hours, or the powder according to the following formula. ℞.—Pulv. rhei, grs. xv; pulv. ipecac. grs. v; magnes. calcinat. grs. xx; sacch. alb. ʒj; tr. opii, gtt. x; ol. anis. gtt. v. or gtt. vj; aq. ℥iij. M. A teaspoonful every hour or two (Dr. Chapman). Columbo root in powder or infusion may also be employed. (Dose from two to three grains.) The infusion of the common logwood (*hematoxylon campechianum,*) Dr. Chapman states, was much employed by Dr. Physick in this stage of the disease. The dose is a teaspoonful. A decoction of the bark of the pomegranate root (*punica granatum,*) or of the flowers, is also considered useful. The best of all these vegetable astringents, according to Dr. Chapman, is a strong infusion of the leaves of the dew (*rubus trivialis*) or of the blackberry root (*rubus villosus.*) The dewberry is preferable, from its greater strength. The dose is about a teaspoonful. The alum plant (*Heuchera Americana,*) a common plant in the neighborhood of Philadelphia, has also been highly recommended as an astringent in this affection. Alum, in the dose of one or two grains with a small quantity of opium may also be employed, or the acetate of lead in combination with the same remedy. Dr. Eberle states that in the advanced stage of this disease, he has occasionally derived considerable benefit from the use of the tartrate of iron according to the following formula. ℞.—Ferri tartrat. gr. xi; syr. zingiberis, ℥ss; aq. pur. ℥ij. M. From twenty to forty drops to be given to an infant four or five times daily. Dr. Chapman advises the sulphate of iron under the same circumstances. ℞.—Ferri sulphat. grs. ij; acid sulph. gtt. x; sacch. alb. ʒj; aq. ℥j. M. Dose a teaspoonful as often as necessary. Dr. Meigs has written favorably of a plunging tepid bath made of the infusion of white oak bark. *American Medical Recorder*, vol. iii. p. 507. He states that it produced a rapid amendment in one case in which he tried it, and a perceptible improvement in another. When the discharges from the bowels are small in quantity, thin, dark colored and offensive, with flatulency, the spirits of turpentine may be given. Turpentine in the acute form should never be employed. It is a "deadly remedy." The following is the formula proposed by Dr. Condie. Prescription.—Mucilag. g. acaciæ, ℥iij; sacch. alb. ʒvj: spt. æth. nitros, ʒiij; spt. terebinth. ʒij; magnes. calcinat. grs. xiij; spt. lavand. comp. ʒij. M. Sig. A teaspoonful three times a day, or oftener when the child is over two years of age. The juniper oil is also considered an excellent palliative for this purpose. Prescription.—Ol. junip. ʒij; sulph. ether ℥ss; tr. opii. gtt. xl. M. Sig. From ten to fifteen drops from three to four times daily. The balsam copaiba may also be employed. The dose is from three to five drops. Dr. Parrish states that he has frequently directed an infusion of bark and cinnamon in lime-water in the following proportions. Prescription.—Best bark, coarsely powdered, ℥ss; cinnamon ʒij; lime water ℥iij. M. It should be suffered to stand a little while and then decanted; a dessert spoonful may be taken several times a day. With this remedy we have no experience. The bark jacket is also occasionally employed. Injections of the bark may likewise be given. These remedies should be employed only when the symptoms are of a typhoid character, the vital forces being insufficient to sustain the patient. When the child is greatly exhausted, stimulating frictions to the body with flannels wrung out of hot brandy and water, or whiskey should be used, or if the exhaustion be extreme, it may become necessary to resort to stimulants internally, as wine whey, or a weak solution of carbonate of ammonia. Dr. Eberle states that in these circumstances he has derived great advantage from the tincture of cinnamon in doses of from fifteen to twenty drops in some mucilaginous fluid every four hours. When the discharges are very frequent, attended with great exhaustion, the spirits of ammoniæ aromaticus in combination with chalk mixture is a useful remedy. Dr. Hartshorne, one of the most eminent practitioners of this city, recommends the use of creosote in the advanced state of this disease. The following is a formula he employs. Prescription.—Creosote, gtt. j.; test. ostrear. præparat., ʒij.; g. acaciæ pulv. ℥ss.; aq. ℥vj. Dose a teaspoonful every two hours for a child two years of age.

Tannin, we would suppose, might also be advantageously employed in the chronic form of the disease when the discharges are abundant. It is said to be less likely to irritate the stomach and bowels than the ordinary astringents. The dose for a child of two years is one-fourth of a grain every three hours, or of the pure tannin one-twenty-fourth of a grain repeated as often.

When there is an aphthous condition of the fauces, Dr. Parrish thinks he has found nothing to do so much good as a gargle of lime-water and bark. Dr. Griffiths, he observes, in some protracted cases of cholera, was in the habit of prescribing scalded lemonade to the child with a very happy effect.

Great attention must be paid to the diet. If not weaned, the child should be confined to the breast, with the occasional use of barley-water, toast, or gum-water. So long as the inflammation is inactive, or when it has subsided or has assumed a chronic form, articles of a more nourishing kind may be allowed, as boiled milk, tapioca, arrow root, or sago, or thin oatmeal-gruel, or flour boiled in milk; the flour should be put in a rag, and then boiled until it becomes hard, and grated. This, we believe to be a most excellent article of diet. We know a remarkable instance of chronic dysentery in the adult, cured by small doses of calomel and opium, and confinement to this diet when all other means had failed. In the chronic form of the disease when the patient is greatly debilitated, the appetite occasionally becomes craving for certain stimulating articles of food, which it may be right to gratify. Dr. Parrish relates several instances of this kind in his lectures. Dr. Wistar, he observes, used to mention the case of a child that was brought to the parlor while the family were at dinner. It was extremely weak, and seemed to be in the last stage of the disease. It showed a strong disposition for some ham which was on the table. The black skin covering the ham was the part which it seemed particularly to desire. It was gratified, and it did not discontinue sucking the piece until it had deprived it of its nutricious juices. From this time it began to recover, and ultimately got well. Dr. Wistar was so convinced of the importance of the above practice that he used to tempt his little patients with small pieces of ham. Some would eat it, others seemed to have no desire for this kind of food. In the latter case he did not press it upon them. Dr. Parrish states that he often prescribed the essence of ham in these protracted cases of cholera. He directs the juice to be bottled up to prevent it from becoming rancid, and to be used as occasion requires. He also relates an instance of a child under similar circumstances that seemed very anxious to eat some butter which was on the table; this child was also indulged, and it continued to devour the butter, lump after lump, until it had made way with the whole. From this time it was allowed as much butter as it desired, and under this plan it recovered.

The same directions with regard to ventillation apply to this as to the first stage.

Third stage.—Symptoms. The symptoms indicative of this stage of the affection are an unusual disposition to drowsiness or stupor, rolling of the head, and chewing motion of the under jaw, succeeded by convulsive movements or rigidity of one or more extremities followed by paralysis. When the disease has progressed thus far, it may be considered almost, if not entirely beyond hope.

Anatomical characters.—These consist essentially, in disorganization of the structure of the brain from softening of its tissue. The softening is sometimes general, but is more often confined either to the cortical substance, or to the central portions of the brain and cerebellum. The softening may exist to such a degree as to cause the brain readily to give way on slight pressure, or its substance may be rendered quite diffluent so as to resemble cream. These effects are the result of long-continued irritation; the substance of the brain when cut into, usually presents numerous red spots from effusion of blood. The pia-mater is more or less injected, and its veins much distended. There is also effusion of serum in the sub-arachnoid tissue, and to a greater or less amount in the lateral ventricles. This, however, is not always the case, the surface being sometimes quite dry.

Treatment.—Notwithstanding the hopeless condition of the patient, it is our duty to make use of such means as afford any, even the slightest prospect of relief. These consist in the application of leeches to the temples and to the mastoid processes, with blisters to the nape of the neck. They should be dressed with mercurial ointment. The treatment in fact is the same as in tubercular meningitis, and we think we have derived more benefit from the use of blisters in that affection, than from any other means. Cloths wrung out of cold water, or of vinegar and water, should be at the same time kept constantly applied to the temples.

Diagnosis.—Cholera infantum may be confounded with tubercular meningitis, or dropsy of the brain. From this, it may be distinguished by the frequency of the discharges, whereas, in the former affection the bowels are usually torpid, and by a proper acquaintance with the natural history of the disease. In tubercular meningitis the premonitory symptoms are such as indicate an affection of the brain; it occurs for the most part in delicate scrofulous children. Cholera infantum commences with looseness of the bowels. In tubercular meningitis, the cerebral symptoms predominate in the commencement. The child is restless and irritable, and complains of acute pain in the head, referring it chiefly to the forehead: the pain is intermittent, and is usually accompanied with a peculiar cry, which has been considered by Coindet and others as pathognomonic; the sleep is more or less disturbed, and there are frequent tossings about of the hands; the head is rolled from side to side, and there is more or less moaning and grinding of the teeth; delirium is almost a constant symptom, and the countenance assumes a peculiar characteristic appearance; this is so marked that even the nurses at the Children's Hospital of Paris, easily recognize the disease. It is only in the advanced stages that cholera infantum can be confounded with tubercular meningitis, when the patient relapses into a state of drowsiness or stupor; which is a prominent symptom of the advanced stage of hydrocephalus, and is often accompanied or preceded by convulsions. Cholera infantum may be confounded with the *typhoid fever* of children. To this affection it bears a close resemblance; it may be distinguished from it, however, by the absence of gargouillement, of the numerous lenticular spots which in typhoid fever usually make their appearance from the sixth to the twellth day, by the agitation and slight delirium at night; the prominence of the spleen, the character of the fever, which is more intense, and continues beyond the ninth day; and the existence of the sibilant râle, all of which are prominent, although not constant symptoms in typhoid fever.

The resemblance between the two diseases is such that it is often impossible to distinguish them apart. Cholera infantum may also be confounded with softening of the stomach. The similarity between the symptoms of gelatinous softening of the stomach, as described by Jæger, and those of cholera infantum, appears indeed to be striking; the coincidence has been observed by Rilliet and Barthez, who do not describe the latter disease as a distinct affection occurring in Paris. The following are the signs of gelatinous softening of the stomach, as laid down by them in their invaluable work. If a child be taken suddenly with obstinate vomitings which persist, with insatiable thirst, with pain in the abdomen, with abundant diarrhœa; if at the same time it emaciates with rapidity, whilst the gastric symptoms *almost exclusively* predominate, we may then infer a gelatinous softening of the stomach.—(Tom. i. p. 467, Art. *Gastrite et Ramollissement de l'Estomac.*)

Prognosis.—The prognosis in cholera infantum may be considered favorable when the pulse becomes slower, when the temperature is restored to the surface, when the vomiting ceases, and the alvine discharges become less frequent, and more natural; an opposite opinion may be formed when the pulse continues feeble; the surface remains cold; the discharges become very frequent, resembling the washings of meat, accompanied with great uneasiness and jactitation, or a disposition to stupor; should there be rigidity and a partial loss of power of the extremities, the patient may be considered almost if not entirely beyond the reach of art.

SUPPURATION AFTER TAPPING IN ASCITES.—Dr. A. Connell, of Georgia, in the May number of the Southern Med. & Surg. Jour., relates a case of ascites in a colored woman, aged 50 years, which had continued more than ten years. He introduced the trocar on the 7th of March, 1841, and drew off between six and seven gallons of *water.* The patient did well; but after two or three years the fluid began to re-accumulate slowly, and on the 5th of March, 1847, she was seized with a violent pain in the right hypochondriac region, which soon extended over the whole abdomen, which had then become enormously distended and was very tender to the touch. He again introduced the trocar and drew off about two and a half gallons of *pure pus*—with very speedy relief from pain. She so far recovered as to be able to walk about the house; but at the end of three weeks her abdomen had again become very much distended, and tapping was resorted to a third time. Four gallons of *pus* were now discharged, every way resembling that drawn off at the previous operation. Some of the matter was also examined by Drs. J. A. Eve and Dugas of Augusta, and pronounced to be "*pure purulent matter.*" The patient was now put under a course of mercurial and diuretic remedies, and recovered speedily and perfectly.

THE CAUSE OF YELLOW FEVER.—B. Rush Mitchell, M. D., U. S. N., in an interesting letter to his father, Prof. T. D. Mitchell, of Lexington, Ky., published in the May number of the Medical Examiner, advances the opinion that yellow fever cannot originate without the presence of *sea air.*—"Upon this point," says he, "I hold this opinion, which I claim as *original,* that yellow fever cannot exist epidemically without the presence of *sea air.* Marsh miasmata alone and unaided may and does produce fevers of various grades; but unless the individual be exposed to a sea air, he cannot have yellow fever." And he sustains this position by several well-chosen facts. The writer had considerable experience in the treatment of yellow fever as it prevailed in the Gulf squadron off Vera Cruz in the summer and fall of 1847; and concerning one of its most distressing symptoms, he says: — "For the nausea and vomiting attendant upon the disease, an ethereal tincture of kreosote was almost invariably beneficial. By it I arrested the black vomit itself and procured recovery. The prescription usually employed was,

Kreosote, - - -	gtt. xx.
Eth. Sulph. - - - -	℥j.
Spts. Lavend. Comp. - -	℥j.

M. A Teaspoonful every fifteen minutes until the nausea and vomiting ceased."

—

WHOOPING COUGH.—Dr. McMurray, in the St. Louis Med. & Surg. Jour. for April, has found the following of great service in the treatment of this distressing affection after healthy secretions of the bowels have been obtained by the use of calomel, ipecac. and rhubarb.

℞ Hydriodate Potassa, - -	gr. vj.
Mucil. Acacia, - - -	℥vij.
Syrup Senega, - - -	℥j.
Tinct. Lobelia, - - -	ʒj.

M. Dose, a teaspoonful four times per day to a child two years old.

—

IODIDE OF POTASSIUM IN TERTIARY SYPHILIS.—Dr. Flagg, in the Charleston Med. Jour. & Rev. for May, 1848, has published some observations principally taken from notes of M. Ricord during the summers of 1846–7. Dr. Flagg remarks:

> Iodide of potassium is the remedy specially applicable to tertiary syphilis in all its phases. Its administration may be commenced by a dose of about seven grains, given three times a day. Should neither beneficial nor injurious effects result, the dose* may be increased by seven grains, every three days, until it amounts to four scruples, beyond which it is seldom necessary to go.
>
> When, however, the symptoms are urgent, tending rapidly to the destruction of important parts, or to material interference with their functions, much larger doses are requisite in the beginning. We should, under such circumstances, commence with a scruple three times a day, and may be obliged very much to increase even this. It has been necessary to give as much as an ounce and a quarter in the course of twenty-four hours, before a curative action could be obtained; and even twice the quantity has been given in the same time.
>
> As adjuvants, bitters are very useful, and the patient should be kept on a highly nutritious diet.
>
> It is a very serious error into which some have fallen, in supposing that a patient laboring under tertiary syphilis should be subjected to a mercurial treatment before the administration of iodide of potassium. Tertiary symptoms appearing, the immediate use of iodide of potassium is peremptorily indicated. When, however, secondary symptoms co-exist with the tertiary, mercury should be administered simultaneously with it, and thus often, when

---

* The dose given three times a day; not the quantity given daily.

neither of these medicines separately avail, the two may be combined with the happiest effect.

The patient should be kept on the use of iodide of potassium during from three to six months, according to circumstances, even though the venereal symptoms should have disappeared; the object being to guard, as far as possible, against a re-appearance of the disease."

The following are some of the pathological effects observed occasionally from its administration. And which require for their alleviation the suspension of the medicine for a while and such palliative treatment as the symptoms, from time to time, may indicate.

1. Tumefaction of the gums, an increased flow of saliva and a saline taste in the mouth, subsequently giving place to that of iodine; in short, a species of salivation not unlike that of puerperal women, and unaccompanied by the coppery taste, erythematous inflammation, and tendency to ulceration, belonging to salivation by mercury.

2. After large doses, pain in the cardiac portion of the stomach.

3. Serous diarrhœa, unattended by febrile action.

4. Excessive secretion of urine, and sometimes pain in the kidneys.

5. Symptoms of severe coryza, running at the nose, pain in the frontal sinuses, &c.

6. All the symptoms of bronchitis, with the exception of fever and muco-purulent expectoration.

7. Different forms of cutaneous disease, among which we shall notice but three:

(*a.*) A species of acne, more acute than the ordinary kind, and not confining itself, like the latter, to the face, chest, shoulders and upper part of the back, but found even on the thighs, where, indeed, it seems at times to develop itself by preference.

(*b.*) Eczema sometimes of a very grave type. M. Ricord relates a very interesting case, in which he was unable to continue the treatment by iodide of potassium long enough to subdue the venereal symptoms, before the appearance of severe eczema would render its immediate suspension necessary; the eczema always subsiding, and the venereal symptoms, which, up to that time, would decline, making fresh progress whenever the medicine was discontinued. The brain was at length attacked, and the unfortunate patient succumbed, after many vibrations between the two forms of disease.

(*c.*) Purpura.—M. Ricord supposes iodide of potassium to exert on the blood a defibrinizing influence, favorable to the hemorrhagic condition, of which influence he regards purpura as an indication.*

8. A condition of the eyes resembling catarrhal ophthalmia, the lids becoming œdematous, and the ocular conjunctiva elevated by serous effusion in the cellular tissue beneath it.

9. Augmentation of the secretive action of the mucous membranes, never terminating, however, in the formation of purulent or muco-purulent matter, unless a predisposition to inflammation exist in the part. A discharge of purulent matter thus occasioned is met with oftenest in the mucous passages of the genital organs.

10. Cerebral excitement, evinced by a species of intoxication, and sometimes cerebral congestion.

---

* This property, however, accords so little with others which it is known to possess, that one may well be excused for remaining skeptical as to its existence, under any thing less than a rigorous demonstration.

SURGERY.

Vascular Tumor of the Neck—Removal.—*By the late* George McClellan, M. D.—The St. Louis Medical and Surgical Journal for April contains the particulars of the case by Dr. R. S. Holmes, of which the following is an abstract. A young lady, aged 19 years, consulted Dr. McClellan in relation to a tumor "situated in front of, but partially covered at its lower end by the sterno-cleido mastoid muscle, over the carotid, which it had pushed aside, and immediately above the thyroid gland; its upper portion was just beneath the skin, presented a hard feel, slightly elastic; the veins above it somewhat turgid, the skin tense, and the tumor but slightly moveable; it was of ten years' standing, and for six months previous to the operation had impeded respiration and deglutition to such a degree as to prevent rest in a horizontal position. It had been pronounced to be goître. Dr. McClellan considered this opinion erroneous, but still was not clear in his own regarding its positive nature. The operation was based upon a negative diagnosis. On the 19th of Sept., 1836,

The patient seated in a chair, the operation was commenced by making a straight incision. some two or three inches in length, directly over the face of the tumor, dividing the skin; by means of a director and a scalpel, the fascia was then dissected that bound it down, and also the sterno-cleido mastoid where it crossed the tumor at its lower angle; after which a species of envelop or sac, that partially surrounded it, was opened, in doing which the tumor, being interlaced with it by meshes of vessels, bled profusely; the knife was thrown aside, and the handle of the scalpel and the fingers used to break up its adhesions; but by this time the blood had commenced to flow so freely, from innumerable vessels, that the greatest expedition was necessary. The operator thrust his two forefingers deep under the base of the tumor, and with one wrench spun it across the room.

This tumor was of a singularly anomalous character—the term vascular would be the most proper to apply to it: but it conveys but a faint idea of the congeries of blood vessels of which it was formed, on looking at it scarcely anything else than the ragged ends of the vessels that were torn in its removal, were perceptible; the small part of it that could not be said to be made up of blood-vessels, was of a hard gristly-like character: it was larger than, and of the shape of a hen's egg; homogeneous throughout; not varying in any part from this vascular and hardened texture.

The hemorrhage which followed the removal of the tumor was tremendous, and was only partially controlled by grasping the whole wound and parts about it in the hand, and then after a time gradually insinuating pieces of sponge wet with turpentine and dipped in the powdered root of the geranium until the wound was full, after which the edges were brought together by means of sutures. The sponge was allowed to remain, the blood still continuing to ooze from beneath and at the sides of it. On the eleventh day the wound looked well, and the hemorrhage had nearly ceased. On the twelfth day hemorrhage returned which was controlled in part by pressure. On the thirteenth day it became so great that there remained no other alternative but securing the bleeding vessels.

The patient being well raised in her bed, with the head falling slightly back, so as fully to expose the neck, the wound was extended to the sternal end of the clavicle, for the purpose of taking up the subclavian, in order to check the flow in the inferior thyroid; but the artery was enlarged, and, as far as it could be felt, and seen by the hemorrhage, it was considered as improper—as, indeed, it was impossible—to tie it. An attempt was here made to displace the sponge, in order to reach the carotid, but everything was again in a pool of blood. 'Sponge it, sponge it,' cried McClellan; useless, vain: it could not be sponged fast enough. He plunged his fingers deep down, to stop the powerful bleeding, but out it poured like the jet from a pipe, spitting from under his thumb. Sponges clammy with astringents, were thrust in, to keep the enemy at bay; still it was blood, blood. Something must be done, ay, and quickly. The desperate ill had as desperate a cure. McClellan, with one bound, leaped into the bed, and with a knee on each side of the patient, tore out every vestige of the sponge in the wound, then, with a plunge of his forefinger and thumb into the pool of blood, he seized the carotid; the hemorrhage stopped for the first time since the operation, a view of the wound was obtained, the carotid was separated from its sheath, and tied below the point where the fingers of the operator still grasped it; the wound was brought together and poulticed.

The loss of blood was great; the patient fainted, and for a number of days was unable to raise her forearm on her body. From this time everything progressed favorably until the nineteenth day, when the patient was attacked with a chill and underwent the regular stages of an intermittent fever to which she had been subject. Several doses of quinine were administered, which arrested the disease on the "third or fourth chill." On the succeeding day the fever, a tertian, anticipated itself by several hours. The patient died in the cold stage. The autopsy revealed the thyroid gland considerably enlarged but not connected with the tumor, the ligature included only the artery.

Popliteal Aneurism Successfully Treated by Compression.—Prof. J. Knight and Dr. Tyler, of New-Haven, have in the Boston Med. & Surg. Jour. for May, 1848, reported a case of Aneurism in which compression by manual pressure was made use of. The following are the facts of the case, with remarks by Prof. J. Knight. In the month of October, 1847, Dr. K. was consulted by a wood-sawyer, about 48 years of age, for a tumor in the left ham.

For several months he had suffered from pain in the limb, especially below the knee, which the patient thought was rheumatism; and about two months before, had discovered a small tumor in the ham, which pulsated from the beginning, and which, as well as the pain, had been gradually increasing. I found the tumor of such a size as to occupy the whole of the popliteal space, and to press strongly upon the tendons of the flexor muscles, particularly those upon the outside of the limb. The leg, below the knee, was very painful and largely œdematous. All the symptoms of aneurism were so strongly marked as to leave no doubt concerning the nature of the affection. The action of the artery and the pulsation of the tumor were easily suppressed by very moderate pressure upon the femoral artery, either where it passes over the bone of the pubis or in the groin, or still lower down where it passes under the sartorius muscle. The patient was directed to lie in bed for a few days; and to relieve the severe pain he suffered, laudanum was administered in doses of 30 or 40 drops, and, when necessary, some of the common cathartics. By these means, employed for a week, the œdema of the leg was cured and the pain very much diminished: indeed, while in bed he was free from pain. The tumor, however, was unchanged in site or character.

We now concluded to attempt a cure by pressure on the femoral artery above the tumor, upon the plan recently practised by Hotton, Bellingham and others. For this purpose we employed successively all the means which have been described—the hoop tourniquet, the calliper-shaped instrument, the common tourniquet, guarding the limb against the pressure of the strap by encasing it in thick sole leather, and by a variety of other mechanical contrivances. There was no difficulty in controlling the artery, either by diminishing its action or suppressing it, by any of the instruments employed. By whatever instruments, however, the pressure was made, however carefully it was guarded, whether continued upon one point only, or shifted from one part of the artery to another, the pain in a short time became so severe that it could not be borne. There was no difference in this respect whether the limb was left uncovered or enveloped in a bandage from the toes upward. The pain was not in the part pressed upon by the instruments, but in the whole limb below, and was felt equally in the thigh, especially the outside of it, and the leg below the knee. The pain usually began in 25 or 30 minutes after the pressure was applied, and became intolerable in 15 or 20 minutes longer, so that it could not be continued in any instance longer than an hour. These efforts were continued at intervals for 8 or 10 days and, as nothing had been gained by them, were abandoned. Others have met with the same difficulty, and have been compelled to apply a ligature to the artery.

Before resorting to this, I concluded, with the concurrence of Dr. Tyler, to try manual pressure upon the artery. To accomplish this, a sufficient number of assistants was procured from the members of the medical class, who cheerfully offered their services. They were divided into relays—two keeping up the pressure for four or five hours, relieving each other every half hour, and these succeeded by two others, and so on. Sufficient pressure to suppress the pulsations of the tumor was found to be most easily made with the thumb or fingers, without a compress, upon the artery, as it passes over the os pubis: and the directions given to the assistants was to keep up this amount of pressure as nearly continuous as possible. This treatment was commenced at 3, P. M. No pain of consequence was produced by it for five or six hours, and then it was not severe, so that the patient was quieted by one-eighth of a grain of morphine once or twice repeated, and slept for the most part of the night. About eight hours after the pressure was applied, the temperature of the limb was diminished, and it appeared shrunken in size. At 11 o'clock the next morning, 20 hours from the commencement of the treatment, upon removing the pressure from the artery, the tumor had diminished very little, if at all, and pulsated about as strongly as ever, but the tibial arteries could not be felt. Probably the blood had ceased to enter them from the tumor during the night, in consequence of a coagulum forming in the artery where it left the aneurism. Upon examining the parts the next morning, about 40 hours from the commencement of the treatment, the tumor was found nearly one-third smaller in size, firm and unyielding on pressure, and entirely without pulsation. All treatment was discontinued. The femoral artery pulsated with its usual strength in the groin, and distinctly as far as its passage through the tendon of the adductor muscles. Between this point and the tumor, it could not be felt. Several of the anastomozing arteries, especially one upon the inside of the limb, could be felt pulsating strongly and enlarged in size.

From that time to this, a period of five months, no change has taken place in the limb, except that the tumor has gradually diminished in size so as now scarcely to be felt; and the leg, which was at first cold and weak, has nearly regained its natural temperature and strength.

The peculiarity of this case consists in the manner of making the pressure upon the artery, by the hands of assistants instead of mechanical contrivances; and in the slight pain the patient experienced from it. The advantages of this mode of making pressure are such, that I should at once resort to it, if, upon trial, pressure by instrument were found to occasion much pain. It is interesting to look back upon the improvement which has been made in the treatment of aneurism during the past one hundred years. It is but seventy years since the only treatment ordinarily adopted for an external aneurism, consisted in cutting into it, emptying it of its blood, and applying a ligature to the two ends of the artery. The danger of this operation, from inflammation and from secondary hemorrhage, was such that a large portion of the patients died.

The first and greatest improvement, and that which has led to all the others, was the plan devised, not guessed at, but fairly reasoned out with great sagacity from well-known physiological and pathological laws, by Mr. Hunter, of placing a litagure upon the artery at a distance from the aneurismal tumor. The success of this mode of operating has been so great, that surgeons had almost ceased to look for any improvement on it.

Upon this plan, however, the treatment by pressure is a great improvement. It is so simple, so easily practised, even by those not familiar with surgical operations, and as far as it has been tried, so entirely free from danger, that it well deserves to be employed in all cases to which it is appropriate. The principal objection to this plan, is the pain which it sometimes produces. This is mentioned in the cases which have been stated, as often severe, and, in some, intolerable. This objection is removed, if it should be found, that in other cases, as in the one which I have stated, manual, in the place of instrumental pressure, is so easily borne. One case does not prove that it will be so, but it is sufficient to encourage others to make trial of it. In some cases of aneurism, which are so near to the trunk of the body that pressure cannot be made upon the artery between it and the heart, it may perhaps be made upon the distal side of the tumor with success. If it is so situated that efficient pressure can be made upon the artery beyond the tumor, and before any considerable branch is given off from it, coagulation of the blood will probably take place, and a cure be effected.

The treatment by pressure would seem, also, to be adapted to some cases of traumatic hemorrhage; those especially where a deeply-seated artery is divided at the bottom of a narrow wound, as in the palm of the hand or the sole of the foot. The trouble and anxiety which attend such cases, are familiar to every surgeon. In such cases, continuous pressure for a long time would probably not be necessary. It is a well-known fact that arteries, when wounded bleed in paroxysms at varying intervals, usually of several hours, and that obvious symptoms precede the hemorrhage. These are, increased heat, pain, and throbbing of the arteries of the part wounded. If, when these symptoms appear, pressure is made upon the arteries above, as upon the brachial artery, when the wounded artery is in the hand, the period of increased action of the vessels of the part and of hemorrhage may pass by, when the pressure can be removed, to be renewed again with the re-appearance of the symptoms, and continued thus at intervals until the wound in the artery is healed. I make this suggestion for those into whose hands a case of this kind may fall. The trouble to the surgeon, which attends this mode of treatment, is not to be taken into the account when the life of the patient is involved, or when he is to be saved from a severe surgical operation.

FAILURE TO LIGATE THE FEMORAL ARTERY FOR FALSE ANEURISM.—*Death in about sixty hours afterwards.*—Professor P. F. Eve, of Georgia, reports a case in the Southern Medical and Surgical Journal for May, 1848, of false aneurism situated "a little below the anterior superior spinous process of the left ilium," produced by a pointed piece of glass which remained in the upper part of the thigh for four days, at the end of which period the patient was so far exsanguinated, that in the attempt to enlarge the opening and remove the foreign substance and clot, for the purpose of ascertaining the point of hemorrhage, the patient became so exhausted that no pulsation could be felt in either of the inferior extremities. An attempt was made to ligate the femoral artery at the crural arch; the ligature was passed around what was supposed by all present to be the artery, (all pulsation being absent to guide). In a few hours the hemorrhage returned and the patient died. A post-mortem examination revealed an immense aneurismal sac extending from the thigh into the pelvis near the anterior superior spinous process. The *femoral artery was not tied*, being pushed one inch from its natural position. "The ligature embraced a portion of a tendon." The circumflex artery was the one wounded by the glass.

—

CANCER OF THE PENIS—*death a few hours after amputation from eating orange peel.*—Professor Eve, in 1837 amputated the penis of an Irishman for cancer; but little hemorrhage followed the operation. The usual dressings were resorted to and a dose of laudanum administered. A few hours after an orange was allowed the patient at his request, which he ate together with the entire rind; soon after he was seized with a severe attack of colic, and died. Dr. E. attributed the death of the patient to eating the orange-peel. Taylor, in his recent work on Poisons, mentions the case of a child aged seven years, that died from eating a quantity of orange-peel. Professor Wood, in the U. S. Dispensatory, has also known a child to die from the effects of eating the rind of an orange.

—

AMPUTATION THROUGH LARGE JOINTS.—Prof. F. H. Hamilton in the Buffalo Med. Jour. for June, is represented as having performed the operation of amputation of the hand through the radio-carpal articulation a few weeks since; and notwithstanding the fears which most surgeons entertain that amputation through this and other large joints will not do well, this healed kindly and has left a good stump, and what is best of all, the power of pronation and supination still exists to a limited extent, and Dr. H. thinks will increase. Several cases are now reported in American journals, the results of which render the propriety of such operations much less doubtful than formerly supposed, if not perfectly proper in all cases of injuries occurring in healthy constitutions, when the location is deemed desirable by the surgeon.

MIDWIFERY AND DISEASES OF FEMALES.

OCCLUSION OF THE VAGINA.—Dr. HAYNE, of Charleston, has reported, in the May No. of the Charleston Med. Jour. for 1848, a case of occlusion of the vagina, following sloughing of the os externum and vagina, five days after delivery with twins. Previous to delivery the patient suffered from intractable œdema of the labia majora.

Nine months after she was seen by Dr. H., who found her suffering from retention of the menses, caused by complete occlusion commencing one inch within the vulva. The size of the abdomen was that of a woman advanced seven months in pregnancy, the fundus uteri as high up as the umbilicus. The plan of treatment pursued, was that of the use of the compressed sponge of a conical shape, allowed to remain twenty-four hours, and then removed, and the vagina cleansed by warm injections. This plan was pursued for four weeks, when, owing to the inflammation of the parts produced, it was discontinued for a week. The treatment was then resumed and continued for three weeks longer, when the seat of the stricture could be felt three and a quarter inches from the vulva. At the end of this time, a severe flooding set in, which was arrested by means of the tampon. The next day the tampon was removed, and a large flow of dark uncoagulated blood followed. Four weeks after she had completely recovered, and her natural menses appeared for the first time in eleven months.

A second case may be found reported in an "Introductory on Atresia Vaginæ," by Prof. Hard, of Ind. Med. Coll., a sketch of which is given in the second vol. of "The Annalist," p. 271. The occlusion, in this instance, resu ted from instrumental delivery. An operation was performed by Prof. H., by which an opening was made "into the uterus at about the anatomical division between the cervix and body." About ten ounces of menstrual fluid flowed. Dangerous inflammation followed, requiring active depletion. At the end of four months, the patient had so far recovered, that she menstruated regularly through an artificial vagina large enough to admit the finger.

A third case of occlusion is reported in the Annalist for June 15th, 1848, in the Proceedings of the N. Y. Path. Soc. It occurred in the hospital practice of Dr. J. O. Stone, of this city. The patient eight months previous had phagadenic ulceration of the vulva and vagina, which resulted in complete occlusion one inch and a half from the vulva. The fundus uteri was felt a little to the left of the umbilicus. A large globular tumor was detected by an examination per rectum, completely filling the pelvis. The operation of puncture through the cicatrix by means of a trochar was resorted to. During the first twenty-four hours, thirty-five ounces of a dark tar-like substance was discharged. Symptons of metro-peritonitis set in on the second day, rapidly progressed, and the patient died on the fourth day after the operation. Autopsic examination revealed the presence of a cicatrix five lines in extent, the opening had been made directly through it into the sac. The sac was found to contain pus. Active inflammation of the cavity of the uterus and fallopian tubes, peritoneal covering of the pelvic viscera covered with effused fibrin of a caco-plastic character, that of the intestines and abdominal walls less intense.

This case is one of interest in the following point of view, viz. as showing most conclusively the direct transmission of inflammation from the mucous to the serous covering of the uterus. The order of pathological phenomena seemed to be, in this case, inflammation followed by suppuration of the sac, endo-metritis, inflammation of the fallopian tubes, inflammation transmitted by continuity over the pelvic and afterwards abdominal portion of the peritoneum.

—

VAGINAL HYSTEROTOMY.—Dr. W. K. Scott, in the Buffalo Med. Jour. for June, 1848, has published the notes of a case in which he performed this operation. "About twenty-five years since, the patient was seen by Dr. S. in consultation with Dr. F. B. Hicks. She had been in labor for more than a week, during which time no traces of the os tincæ could be found. She was a healthy woman and had borne children. The pains were regular from the first; when exhausted she would sleep quietly for a short time."

The operation was performed by Dr. S. by means of a small scalpel, guarded by the finger; a gush of blood followed the incision. The placenta was adherent to the cervix uteri. Dr. Hicks proceeded to turn and deliver the child, which was accomplished in a short time. The patient recovered rapidly and has since borne children.

Two cases have previously been reported in American practice, for the first, see Vol. 2, p. 199, of this Journal. The second will be found in the American Jour. of Med. Sci., Vol. 15, p. 348. Both of these cases occurred in the practice of Prof. Bedford, of the New York University, in neither, however, was the placenta attached over the os or cervix uteri. The operation was successful to both mothers and children.

VENTRAL PREGNANCY.—Dr. S. A. Peters, of Missouri, in the Med. Exam. for May, 1848, reports a case of extra-uterine pregnancy, where "the embryo and its membranes were found partly adherent to the upper and anterior part of the bladder." The chorion, amnion and placenta were distinctly seen—the embryo three inches in length. The uterus three times its natural size and its walls three-fourths of an inch thick. There was no decidua, gelatinous or other matter found in its cavity. Death was produced by the rupturing of the membranes of the ovum. "*Fifteen pints* of blood were removed from the abdomen."

MATERIA MEDICA AND PHARMACY.

ADULTERATED MEDICINES.—*Extract from Dr. Edwards' Report on Imported Adulterated Drugs, Medicines, &c., read before the House of Representatives, June 2d,* 1848.—Composed, as is your committee, of a majority of men who have made the study and practice of medicine the chief purpose of their lives, they feel no hesitation in admitting that the facts they are about to submit were but partially known to them, individually, until a very recent period. They have had before them specimens of the adulterations of which they speak, and ask a generous confidence in their statements.

In consequence of the stringent laws now in force in most parts of Europe, regulating the trade in drugs, and the dispensing of medicines, none but genuine articles, and those of acknowledged strength and purity, are allowed to be used or purchased. All inferior and deteriorated drugs in a crude state, as well as adulterated medicinal and chemical preparations, must, therefore, as a matter of necessity, find a market elsewhere; and that market, unfortunately for the people of this country, has long been and still is found in these United States.

For a long series of years this base traffic has been constantly increasing, until it has become frightfully enormous. It would be presumed, from the immense quantities, and the great variety of inferior drugs that pass our custom-house at New-York, in the course of a single year, that this country had become the grand mart and receptacle of all the refuse merchandise of that description, not only from the European warehouses, but from the whole eastern world.

On reference had, not long since, to the custom-house books in New-York, it was found that 7,000 lbs. of rhubarb-root had passed within ninety days, not one pound of which was fit, or even safe, for medicinal purposes. Much of it had become greatly deteriorated by age, was worm eaten and decayed, while other portions, notwithstanding they showed a somewhat fair appearance externally, (the color, &c., having been brightened by artificial means for the purpose of deception.) gave internal, unmistakable evidence of the virtue of the root having been extracted by previous decoction, for the purpose of making what is sold as the "extract of rhubarb," and thereby rendering it of no further value for medicinal use. This article was invoiced at from 2½ pence sterling, (5 cents) to 7 pence (14 cents) per lb. The price of good rhubarb at the place of production, has been, for several years past, about as follows: The *East India*, from 35 to 45 cents per lb., according to circumstances; the *Turkey* or *Russian*, from $1 25 to $2 50 per lb., exhibiting a very wide difference in price, as will be perceived, between the good and refuse article.

Another of our more important articles of medicine, particularly in the newly-settled portions of our country, comes to us in large quantities entirely unfit for medicinal purposes; but like the worthless rhubarb root, is eagerly bought up at auction sales by unprincipled drug dealers, and sent to the drug mills, where it is ground and powdered, the color, smell and natural taste imitated, and afterwards sold to country dealers and others as a *good article.* The result of this is, that it is finally dispensed to the sick, at the sacrifice, doubtless, of many valuable lives every year; we mean the *Peruvian bark.*

Several varieties of this bark are used in medicine, viz.: the "yellow," the "pale," the "red," &c., but either variety can scarcely ever be obtained, at the place of production, of good quality and in good condition, at a less rate than from 30 to 40 cents per pound; and the quality generally used for the manufacture of *sulphate of quinine,* or the salts of *Peruvian bark.*) has not for years been obtained, from those parts of South America where it is produced, at a less price than from $60 to $80 per quintal of 100 pounds. The worthless article, particularly referred to above, comes principally from Europe, and seems to be made up of the different varieties already named, as well as to be in a greatly deteriorated condition from age, or from having had its medicinal virtues extracted, for the purpose of making the extract of Peruvian bark—a valuable medicine.

From appearances, it consists mainly of refuse material collected together, in foreign warehouses, for exportation. It is invoiced from 2 to 7 cents per pound. Thousands of pounds of this trash have passed through the New-York custom house, at the above price, during the past year, and may justly be considered very dear even at those rates.

Columbo and gentian roots, and many more of the important crude drugs, come to us in a similar worthless condition.

Opium.—An article of priceless worth in the treatment of disease, is now sent to this country in a greatly and dangerously adulterated state; and as a proof that the fraud carried on in the preparation of this valuable drug is now made not only a regular, but an extensive business, we are assured, on most reliable authority, that it is shipped directly from Smyrna, the most important place of its production, deprived not unfrequently of *two-thirds of its active principle*, that proportion of its medicinal property having been extracted for the manufacture of *morphine.* Opium is found to be adulterated with Spanish liquorice paste, combined with a small quantity of some bitter extract, and when but moderately deteriorated in this way, the fraud is not easily detected at first view; but it has been passed from Smyrna, *by the way of some of the European markets*, so freely adulterated, that the fraud was readily detected merely by the smell! no analysis being necessary. The so-called *opium* of this description is often found infested with living worms. Of course this decaying mass is not sold to the retailer or jobber in this condition, but is previously worked over and combined with a better quality of *opium*. Your committee embrace with pleasure this opportunity to present the name and services of Dr. M. J. Bailey, examiner of drugs, &c., at the New-York custom-house, as one to whom the country, and especially the medical profession, are deeply indebted, for the firm and faithful stand he has taken for exposing these frauds. His communications with us have been frequent and important. The activity and frankness of this gentleman deserves the highest commendation; we give an extract of a letter received from him, dated April 29th, in which he says:

"Motives of self or pecuniary interest, (had I listened to the prayers of those interested,) would have prompted me to withhold from the public the facts I have willingly disseminated, in order that permanent benefit might result therefrom. Many an argument have I held with those who professed to think it no moral wrong, while it was more profitable to themselves to impose such worthless and dangerous trash upon the community as we complain of."

For many years a considerable proportion of the foreign chemical preparations, medicinal extracts, &c., have come to us more or less adulterated; but the base fraud is no longer confined to that class of medicines. Opium is now adulterated to a most fearful extent, and so adroitly as almost to defy detection, by the unsuspecting and confiding purchaser. I have lately passed three invoices of opium from London, which, on opening the cases, seemed to all external appearances to be as it should, but a closer examination proved it a base compound of that drug with various vegetable extracts—the mass not affording more than about one-third part of pure opium. When I questioned the consignee, (and to the credit of our regular importers, most of these adulterated and deteriorated drugs and medicines are consignments from speculators abroad,) they admitted their private advices gave them to understand that the article "was not quite pure;" yet, as the law now is, I must pass all such dangerous and rascally imitations, if they are found *to be charged at their full value, and in commercial language, to be the article specified in the invoice.* In fact, I have no authority to examine into the purity, &c., of any article further than to enable me to judge as to the correctness of the value expressed in the invoice." We subjoin also a quotation from the Boston Traveller of last week, entitled "Frauds in Opium." "About twenty cases of opium were sold at auction yesterday, by John Tyler. It was imported from Smyrna and Liverpool in various vessels, and to all appearances was of equally good quality. Notwithstanding this, however, its price varied from $3 45, $1 35, *six cents, to three cents per pound.* An exposition of the fraud was made at the sale. It is said to consist in the extraction of the morphine, or vital principle of the drug, before exportation. This fraudulent opium was invoiced at a lower price than that of the first quality, but still greatly above its real value."

Genuine scammony, another important drug, is now but seldom imported. Not a single pound of pure Aleppo scammony has passed the New-York custom house during the last twelve months. The so-called scammony, now imported, contains only about one half the active principle of the genuine article; it being a combination of that drug and a worthless vegetable extract commingled with clay. Pure scammony is an expensive drug; hence the object of its adulteration.

Many of the medicinal gums and gum-resins imported are so deteriorated or combined with earthy or other matters, that they are not only unsafe, but worthless for medicinal purposes.

The medicinal extracts, which are very important medical agents when pure, were formerly made with great care, and of one uniform strength, but they now come to us not only prepared of the refuse or inferior drugs, but also greatly adulterated, &c. These worthless extracts, in external appearance, are well calculated to deceive—the parcels being as neatly put up, labelled, &c., as those of the genuine. They are sold by the foreign manufacturer, on an average, at about one-half the price of the pure article.

In this business, as well as in the manufacture of chemical preparations used in medicine, there has been for years past a regular system of fraud carried on by many of the foreign manufacturers. They have not only expressed their willingness to prepare and send out to order, any article in their line, adulterated to any extent desired, with a corresponding price to suit, but they now, it seems, keep constantly on hand a supply of the adulterated, as well as of the pure preparations, and when remonstrated with by our honest importers, they excuse themselves by saying that "they must accommodate demands or lose sales, &c., as both qualities are ordered in large quantities from the United States—the genuine article, as they are given to understand, for the seaboard, and the adulterated for the western trade !"

Sulphate of quinine, or the salts of the *Peruvian bark*, a medicine now considered indispensable and of universal use, particularly where *intermittent fever* prevails, comes to us adulterated in various ways. The usual method is to combine it with *salicine*, (the salts of the *willow bark*,) *chalk*, *plaster of Paris*, &c. The salicine possesses similar medicinal qualities, and resembles quinine very much in appearance, but it is afforded at less than one-fourth the price, and is very far inferior in strength. This spurious article is largely imported, neatly put up in *French style*, with the label of the celebrated *Pelletier*, of Paris, (the original and always one of the most honorable foreign manufacturers,) on each article. This trash is made at an extensive establishment in Belgium, the whole business of which, your committee are informed, is to manufacture and dispose of base imitations of all the important foreign chemical and medicinal preparations. An agent of this establishment has been in this country for the last ten months. His business is to effect sales, and obtain orders. No wonder that those suffering the affliction of fever and ague in the western country take quinine by the tea-spoonful at a dose, rather than a few grains, which is all-sufficient when the article is pure.

Calomel is imported not only crudely prepared, but more or less adulterated with a white argillaceous earth or clay, and other articles ; while it is put up after the manner, and bears the name of some well-known and deservedly-popular manufacturing chemist, the whole is a base imitation and fraud.

Large quantities of an imperfectly-manufactured *iodine* is imported in kegs, and put in the usual small bottles and parcels here. It is very impure, black and damp, and totally unfit for medicinal purposes.

Much of the *iodide* or *hydriodate of potass*, a valuable medicine when pure, is greatly adulterated by the admixture of the nitrate of potass, (saltpetre,) thereby changing its nature, and rendering it comparatively worthless.

Many chemical preparations are not unfrequently misnamed ; imposing, by that means, upon the purchaser some inferior article, bearing a similitude to the genuine, but different in medical qualities and value ; the label and the mode of package afford no security to the honest purchaser.

Thus might your committee continue through the whole catalogue, as most of the fine medicinal chemicals are prepared of unequal strength and purity, for the purpose of cheapening their cost, thereby rendering them less effective and more uncertain in the treatment of disease, and, in some cases, actually dangerous to the patient as well as obviously unjust and greatly embarrassing to the physician. *We* will here, however, proceed no further ; believing the facts already set forth, respecting very many of our most important medicines, and those in daily use, will, if fully understood, satisfy your honorable body of the imperative necessity of the passage of a law calculated effectually to put a stop to this reckless and murderous trifling with human life for the sake of filthy lucre. Every feeling of humanity, as well as regard to justice towards those who are entrusted with the lives of the people, demand this at your hands.

[To be continued.]

MISCELLANEA.

Medical Services—*Legal responsibility of discontinuing the same.*—A suit was recently instituted in this city by a patient against his physician for abruptly discontinuing his attendance, after paying him a few visits, without notice being given of the same. It was alleged by the plaintiff, that his health was impaired by the defendant's so doing and the damages were laid at $5,000. The defence set up by the defendant was, that the plaintiff had during his attendance taken other medicines than those ordered by himself, and feeling himself insulted, and at the same time unwilling to assume the responsiblity of the case without his directions were implicitly followed, he considered it proper to discontinue his attendance—(all of which was perfectly proper and justifiable, but he should have notified his patient of the same.) Judge Ulshoeffer, in his charge to the jury, gave the following opinion. " A physician when once employed to attend a patient, cannot afterwards withdraw himself without giving due notice to the patient, so as the latter might provide himself with another physician ; but by giving such notice, he is at liberty to withdraw from his attendance, and the patient cannot maintain an action. If a patient neglects to comply with the directions of his physician, and does not take his prescriptions, the physician may withdraw without subjecting himself to an action at law ; and lastly, that if an injury arise to a patient from the combined neglect of himself and his physician, in such case the patient cannot maintain an action." The jury gave the plaintiff a verdict of six cents damages.

—

New-York Hospital. — Dr. F. U. Johnston, for upwards of twenty years one of the attending physicians to this time-honored institution, has resigned. The urgency of his private professional engagements is the reason for his retirement from public duties. The charity has lost one of its most faithful servants and the clinical student an able and safe teacher. The vacancy thus caused has been filled by the appointment of Dr. H. D. Bulkley, one of our most thorough and accomplished physicians, who brings with him into his new field of labor a well-earned reputation. The appointment of Dr. B. has caused universal satisfaction.

—

Influence of Statistics on Quackery.—Dr. Cartwright, in his recent statistical inquiries made on the influence of empiricism on the public mortality of Natchez for the last sixteen years, has clearly and fairly demonstrated, "that the prevalence of quackery has been more fatal, nearly two to one, than the prevalence of yellow fever, cholera, measles, whooping-cough, smallpox and all other diseases put together."

—

University of Louisiana, *Medical Department.*—The Legislature of the state of Louisiana have, as will be seen in the May number of the New Orleans Medical and Surgical Journal, appropriated thirty-five thousand dollars to the University. We are pleased to learn that " a large portion of this sum is to be expended in completing the medical department." The plan to be recognized in its completion is that of the University of Pennsylvania. We congratulate our brethren of the "Crescent City," in the attainment of this most desirable acquisition. It argues well for the future prospects of our honorable profession.

—

REWARD OF THE EDITOR OF A MEDICAL JOURNAL.—In the June number of the Southern Medical and Surgical Journal, Prof. P. F. Eve, its editor, says, "From inquiries made at the National Medical Association, we venture the assertion that not one of the twenty Medical Journals of our country is adequately sustained, not one paying its editor $500 a year. The main income from his labor consists in the books sent him for review or notice, and in the reception of the exchange list."

—

AMERICAN MEDICAL ASSOCIATION.—For the following abstract of the proceedings of the American Medical Association, held in Baltimore in May last, we are indebted to the Medical News and Library for June.

The association assembled in Baltimore, on Tuesday morning, May 2d, and the proceedings were opened by a short and appropriate address from the President, Dr. Chapman, of Philadelphia. The first day was occupied principally in receiving a report from the committee of arrangement, of the list of delegates to the association; the report of the treasurer, and the consideration of certain resolutions having reference to preliminary matters, &c.

Wednesday Morning, May 3d.

On motion of Dr. Hays, a committee of one from each State represented, was appointed to nominate officers for the ensuing year, who reported the following nominations, which were unanimously confirmed.

President,—A. H. Stevens, of N. Y.

Vice Presidents,—J. C. Warren, of Mass., Samuel Jackson, of Penn., Paul F. Eve, of Geo., and W. M. Awl, of Ohio.

Secretaries,—A. Stille, of Phila., and H. J. Bowditch, of Boston.

Treasurer,—Isaac Hays, of Philadelphia.

The president being conducted to the chair, returned thanks in a brief and impressive address.

On motion of Dr. West, the thanks of the association were presented to its late officers, for the able, faithful and gentlemanly manner in which they had performed their duties.

Copies of the code of ethics of the Philadelphia College of Pharmacy were presented, and the code was ordered to be inserted on the minutes.

Dr. J. R. Wood, presented a communication from the New-York College of Pharmacy, regarding the importation and vending of impure drugs, which was ordered to be placed on file.

Dr. T. O. Edwards, a member of Congress from Ohio, and chairman of a special committee of the House of Representatives, to which was referred the subject of the importation of worthless, adulterated and misnamed drugs, was introduced to the association, and invited to address it.

Dr. Edwards read a full and very interesting statement of the extent to which drugs are falsified, particularly with a view to their sale in the United States.

On motion of Dr. E. Hale, the thanks of the association were presented to the Hon. Dr. Edwards, for his important and interesting communication, and a committee of five members were appointed to prepare and report to the association a memorial to Congress on the subject.

The following resolutions, introduced by Dr. C. C. Cox, were also referred to the same committee.

Resolved, That a committee of five be appointed to report at the next meeting of the association—

1st. The nature and extent of the sophistication and adulteration of drugs, as practised by the wholesale dealers and retail druggists.

2d. The best means for the prevention of the evil in its various forms.

Committee, Drs. Parsons, Cox, Francis, Huston and Carr.

Dr. Hays, from the committee on publication, presented a report with the following resolutions, which were adopted.

Resolved, 1st. That the assessment for the present year be three dollars.

2d. That voluntary contributions be invited.

3d. That a copy of the printed proceedings be furnished to such members only of the association as shall have paid the assessment for the year.

4th. That those members of the association who shall pay five dollars instead of the assessment of three dollars, shall be entitled to three copies of the proceedings.

5th. That the committee on publication be authorized to make such arrangements for the sale of the transactions of the association as they may deem expedient, and to present copies to such public libraries, editors of medical journals, &c., as they may consider proper.

The report of the standing committee on obstetrics was presented, and read by the chairman, Dr. Harvey Lindsly, and referred to the committee on publication.

Invitations were presented to the association for the next meeting to be held in Boston, Washington, D. C., Columbus, Cincinnati, Buffalo, Nashville, Charleston and Newark, which were laid upon the table to be taken up in order.

The following resolutions were presented and laid on the table for future consideration.

By Dr. Stille—*Resolved*, That the delegations from the several States be earnestly requested to urge upon the deputations in Congress of their respective States, the necessity of a law against the importation and sale of adulterated, deteriorated and misnamed drugs, and recommending the enactment of the law presented by Dr. Edwards, the Chairman of the special committee of the House of Representatives, having charge of the subject.

By Dr. T. F. Cock—*Resolved*, That the delegation of each State be requested at once to memorialize the representatives of their State in Congress, with a view of forwarding the passage of a law regulating the sale of drugs.

By Dr. Cox.—*Resolved*, That a committee of three be appointed by the association to collate and digest the required information upon the subject of the abuse and adulteration of drugs, practised by wholesale dealers and retail druggists throughout the country, and to report such measures for the suppression and prevention of this growing evil, as will, in their opinion, conduce to this end.

Dr. Norris, chairman, presented and read a report from the standing committee on Surgery, and Dr. I. Parrish a report from the same committee, relative to the use of anæsthetic agents, both of which were referred to the committee on publication.

Dr. Stewart laid upon the table the following resolution:—

Resolved, That a committee of one from each State be appointed to report to this association at its session of to-morrow morning, the names of gentlemen to compose the various standing committees for the present year, and that said committee be instructed to present the names of such members only as are in actual attendance. Adjourned.

Wednesday Afternoon.

The association was called to order by the President.

On motion, the rules were suspended, to permit the consideration of the resolution offered by Dr. Stewart at the close of the morning session, which was then adopted, and the committee ordered to consist of the same members as that appointed for the nomination of officers.

On motion of Dr. W. Parker, the same committee were instructed to report a place for the next meeting of the association.

Dr. O. W. Holmes, chairman, presented and read the report of the committee on Medical Literature, which was referred to the committee on publication.

On motion of Dr. A. L. Pierson, the association proceeded to consider so much of the reports on obstetrics and surgery, as relates to the use of anæsthetic agents, and Dr. J. C. Warren made some interesting observations on the subject.

Dr. Hamilton presented the following resolution :—

Resolved, That considering the present limited amount of authenticated facts, in relation to the danger or safety, of anæsthetic agents in medicine, surgery and obstetrics, this association is not now prepared to determine upon their value, or the propriety of their use, and that the subject be referred to a special committee, who shall report at the next annual meeting.

Owing to the lateness of the hour, action on this resolution was postponed, and it was, at a subsequent session, referred to the appropriate standing committees. Adjourned.

Thursday Morning, May 4th.

The president called the meeting to order. The minutes of yesterday's meetings were read and accepted.

After some preliminary matters were gone through with, Dr. Cohen, of Baltimore, presented the following resolutions, which were adopted.

Resolved, That the American Medical Association regards with pride and satisfaction, the services rendered and the position maintained by that portion of the profession associated with the military department of the country ; and in consideration of the severe and arduous duties which the medical officers have performed, the risks and dangers to which they have been exposed in the performance of those duties during a period of warfare, and in an unhealthy climate, it is deemed just and proper by this association that their services should receive from the government an acknowledgment, corresponding to that awarded to their brother officers.

Resolved, That the members of this body hereby express their gratification with the position recently assigned the medical officers of the navy, and their influence will be used to sustain their naval brethren in a position alike due to them and the profession of which they are members.

Resolved, That a copy of these resolutions be forwarded to the Secretaries of War and of the Navy, through the chiefs of the medical departments of each service, and to the chairman of the military and naval committees in each House of Congress.

Dr. Wynne presented a communication from the medical department of the National Institute on the subject of hygiene, and offered a resolution that the communication be referred to a select committee of five, which was adopted, and the following committee were appointed :—Drs. J. Wynne, J. M. Thomas, O. W. Holmes, Isaac Parrish, and G. L. Corbin.

Dr. Roberts presented a memorial from the naval medical corps of the United States, and offered a resolution that it be referred to the committee on publication, which was adopted.

The committee appointed to nominate the standing committees, reported the following nominations, which were adopted.

Committee of Arrangements.—Drs. Jacob Bigelow, E. Hale, Z. B. Adams, — Dalton, John Ware, O. W. Holmes, N. J. Bowditch, of Boston.

Committee on Med. Sciences.—Drs. L. P. Yandell, Ky.; Smith, Ohio; White do.; E. S. Carr, Vt.; S. Jackson, Penn.; Upshur, Va.; Harris, Tenn.

Committee on Pract. Medicine.—Drs. Condie, Penn.; Gerhard, do.; Clymer, do.; John Ware, Boston; G. Tyler, D. C.; Fithian, N. J.; Kreider, O.

Committee on Surgery.—Drs. N. R. Smith, Md.; Askew, Del.; Baxley, Md.; Knight, Conn.; Pancoast, Penn.; McGuire, Va.; Shipman, Ind.

Committee on Obstetrics.—Drs. Wellford, Va.; Peebles, do.; N. Young, D. C.; Z. B. Adams, Mass.; C. R. Gilman, N. Y.; J. A. Eve, Ga.; Rouse, Ill.

Committee on Med. Literature.—Drs. J. P. Harrison, Ohio; Breese, do.; Edwards, Ill.; Latta, Ind.; Holmes, Mass.; Stewart, Md.; Thomas, D. C.

Committee on Med. Education.—Drs. F. C. Stewart, N. Y.; John Watson, do.; J. M. Smith, do.; A. L. Pierson, Mass.; Pennington, N. J.; Gaillard, S. C.; Meeker, Ind.

Committee on Publications.—Drs. I. Hays, Penn.; Stillé, do.; Condie, do.; Bowditch, Mass.; Dunbar, Md.; Barker, Conn.; Jump, Del.

The committee also recommended the city of Boston for the next meeting of the association. The report was accepted, and nominations confirmed.

Dr. Wellford presented and read a report from the standing committee on Medical Education, accompanied with a series of resolutions, which were amended and adopted as follows:—

1. *Resolved*, That this association considers defective and erroneous every system of medical instruction, which does not rest on the basis of practical demonstration and clinical teaching, and that it is therefore the duty of the medical schools to resort to every honorable means to obtain access for their students to the wards of a well-regulated hospital.

2. *Resolved*, Therefore, that this association earnestly and respectfully appeal to the trustees of hospitals to open their wards for the purposes of clinical instruction, satisfied that they will thereby more efficiently aid the cause of humanity, and more perfectly accomplish the benevolent intentions of the founders of the charity.

3. *Resolved*, That the practice of appointing physicians and surgeons to the charge of an hospital on political or other grounds than those of professional and and moral worth, is inconsistent with the welfare of its inmates, and of consequence, inhumane and unjust, subversive of the objects of its founders, and incompatible with a conscientious appreciation of the high responsibilities devolved on the appointing power.

4. *Resolved*, That this committee reiterate, and strongly recommened to the association, a practical observance of the resolutions appended to the report of the committees on preliminary education, and on the requisites for graduation, submitted to the medical convention, which assembled in Philadelphia, in May, 1847.

5. *Resolved*, That the faculties of the different schools be requested and advised to institute daily or weekly examinations, recapitulatory of the previous lecture or lectures, and take such measures as may enable them to ascertain the regular attendance of the students upon the lectures up to the close of the term.

6. *Resolved*, That this association recommend to the faculty of each medical school to conduct the final examination of candidates for diploma, in presence of some official person, or persons, properly qualified to recognize the attainments of the candidate, but who has no pecuniary interest in the institution or in the number of its pupils.

7. *Resolved*, That it be also recommended, that, in view of the inaugural Thesis, or in addition thereto, each candidate for the diploma be required to present to the faculty, at or before the time of final examination, a report drawn up by himself and from his personal observation, of not fewer than *five* cases of disease, and upon which he shall be duly examined.

8. *Resolved*. That the faculty of each medical school be requested annually, and as early as possible, to furnish the chairman of the committee on

education with a statement of the number of pupils and of graduates in their respective schools, together with such other information as may expedite the labors of the committee, and enable it to discharge the duties assigned by the constitution under which it acts.

Dr. J. M. Smith, chairman of the standing committee on Practical Medicine, gave a short sketch of his report, and on motion he was requested to transmit a copy of the report to the committee on publication.

Dr. Hays asked permission to inquire whether it was the sense of the Association in referring the minutes, reports of the standing committees, with the accompanying documents and other papers to the committee on publications, that these should be published entire, or that the committee should have discretionary powers?—when, on motion, it was resolved that discretionary powers be vested in the committee.

Thursday Afternoon, May 4th.

Dr. Usher Parsons, from the select committee on the adulteration of drugs, presented the draft of memorial to Congress, which was ordered to be signed by the officers of the Association, and sent to Dr. Edwards, chairman of the committee appointed by Congress on this subject.

On motion of Dr. J. L. Atlee, a resolution was adopted, earnestly recommending to the physicians of those States in which State Medical Societies do not exist, to take measures to organize State Societies before the next meeting of the American Medical Association.

The committee to whom was referred the communication of the Medical Department of the National Institute, on the subject of hygiene, reported, recommending the appointment of a committee on hygiene, to consist of twelve members, to be appointed by the president, with power to fill vacancies. The following constitute this committee:—Drs. Jas. Wynne, Balt.; Charles P. Gage, Concord, N. H.; J. M. Thomas, Washington, D. C.; Isaac Parrish, Philad.; P. C. Gaillard, Charleston; L. P. Yandell, Louisville; J. P. Harrison, Cincinnati; A. Smith, Peterboro', N. H.; J. Curtis, Louisville; E. H. Barton, N. O.; J. H. Griscom, N. Y.; Turner, N. O.

The report of the committee on indigenous botany, was presented and referred to the committee on publication, and the documents which accompanied it, were referred back to the committee, with a request that it would continue its researches.

Friday Morning, May 5th.

The association met at 9½ o'clock. On motion of Dr. J. C. Warren, the following resolution was adopted.

Resolved, That in order to prevent the loss of time to the Association, the committee of arrangement be requested to sit on the day before the annual meeting, and that all members who arrive on that day be desired to present their credentials without delay.

On motion of Dr. G. L. Corbin, a committee of twelve was ordered to represent the association at the meeting of the British Association, and of the Prov. Med. and Surg. Association, and the following were appointed: Dr. Geo. B. Wood, of Philadelphia, Jacob Bigelow, of Boston, and H. H. McGuire of Winchester, Va.

On motion of Dr. Bowditch, the committee on hygiene were requested to investigate the effects of confinement in prisons and penitentiaries, and of the discipline in general, in these institutions, on the health of the inmates, and report to the meeting of the association.

On motion of Prof. Jackson, the committee on hygiene were requested to direct their attention to the following subjects:

1. What is the influence likely to be produced by the extensive introduction of tea and coffee into the diet of persons under the age of puberty?

2. What is the influence of the substitution of the luxuries of tea and coffee as food upon the health of the laborious classes?

Dr. Gordon Buck presented, with a drawing, a memoir, entitled "a new feature in the anatomical structure of the genito-urinary organs," which was referred to the committee on publication.

On motion of Dr. Zulick, the members of the association were requested to transmit to the chairman of the appropriate standing committees, the histories of any important cases, which they may meet with in practice.

On motion of Dr. R. H. Thomas, the delegates from medical societies, universities, colleges, &c., were requested to suggest to their several constituencies, the propriety of making an annual contribution towards the funds of this association, in proportion to the number of copies of the proceedings desired by them.

On motion of Dr. Upshur, the committee on publication were desired to append to the proceedings of the association each year a catalogue of its officers and permanent members.

Dr. Stillé presented a circular from the Philadelphia College of Pharmacy, with a resolution and memorial to Congress annexed, relative to the introduction and sale of spurious and sophisticated drugs, which were referred to the committee on publication.

Various proposals for amending the constitution were offered, and, as required, laid on the table for consideration next year.

On motion of Dr. Stillé, it was unanimously resolved that the thanks of the association are hereby tendered to its committee of arrangements, and to the committee of reception of the delegates from Baltimore, for their constant and efficient exertions to provide for the comfort and enjoyment of this body, to the Medical Faculty of the University of Maryland, to the Faculty of Washington Medical College, and to the members of the medical profession in this city, for their warm and courteous welcome and hospitable entertainment, which have strengthened the bonds of personal friendship and professional brotherhood between them and the delegates from other parts of the United States.

On motion of Dr. Baxley, the thanks of the association were presented to the Hon. J. G. Davis, Mayor of the city of Baltimore, for facilities placed at the disposal of the committee of arrangements for promoting the comfort and convenience of the association.

On motion of Dr. Biddle, the thanks of the association were unanimously tendered to the president for the ability, courtesy, and impartiality with which he had discharged the duties of his chair.

A vote of thanks to the remaining officers was also passed, and the association then adjourned *sine die.*

PART FOURTH.

FOREIGN MEDICAL RETROSPECT.

MEDICAL PATHOLOGY AND PRACTICAL MEDICINE.

Epidemic Fever of Ireland.—Dr. Lalor has in an article in the Dublin Journal of Medical Science, for February, 1848, published his views on the connection existing between the famine of that unhappy country and the epidemic *Gastro-purpuric*, or as it has been called *famine fever*. The following are the conclusions he gives at the close of his elaborate paper.

1. Gastric fever prevailed before the failure of the potato crop in 1845.
2. The purpuric eruption became prevalent about the time of this failure, but previously to the occurrence of famine.
3. This eruption did not appear with a new fever of its own, but as an addition to the previously reigning fever; and it was a frequent accompaniment of smallpox as well as of gastric fever.
4. Purple spots have not appeared in measles, and scarcely more frequently than usual (if at all so) in maculated typhus.
5. Other diseases have not been complicated with this eruption, even in delicate and ill-fed subjects.
6. With the setting in of the general and aggravated famine in last autumn, gastro-purpuric fever became considerably more prevalent and fatal, the eruption assumed a worse character and greater frequency, dangerous symptoms and complications previously observed grew more common, and new ones set in, amongst which was putrid diarrhœa.
7. *Post-mortem* examinations have shown that putrid diarrhœa arose from profuse purpura of the intestines running into a peculiar form of gangrenous ulceration, and that less malignant forms of diarrhœa were often concurrent with a more sthenic and scantier purpuric eruption of the intestines not running into gangrene.
8. Gastro-purpuric fever was at its height, both as to malignancy and frequency, during the prevalence of cold and moist weather; and an increase of mortality and fever was invariably observed on the change of weather from dry and warm to moist and cold, and *vice versâ*. In connection with this point the severity of last winter must not be forgotten.
9. Gastro-purpuric fever and diarrhœa were most frequent, and of the worst forms, amongst the ill-fed, ill-housed, ill-clothed,—amongst the most uncleanly, and those of weakest constitution, as females and persons near the two extremes of age, and amongst those exposed to an over-crowded and vitiated atmosphere. Bad forms of gastro-purpuric fever and of diarrhœa were rare in the opposite classes.
10. Nevertheless, gastro-purpuric fever, and less severe forms of diarrhœa than the putrid, have attacked many who were apparently placed in conditions the most opposed to their development; but such persons had been previously much exposed to the contagion of gastro-purpuric fever.

11. The eruption, diarrhœa, or other symptoms, have never assumed their malignant form in such cases, unless when the patients were exposed to a foul atmosphere, as in the over-crowded wards of an hospital; but such exposure has occasionally developed the worst symptoms, even in the most robust individuals. From the observation of certain cases, I think there is at least a strong presumption, that foul air alone is capable of developing gastro-purpuric fever.

12. Cases of death have occurred from. and I have myself seen many suffering, apparently, owing to the unmixed effects of famine; and in those cases the phenomena of gastro-purpuric fever did not present themselves.

13. However gastro-purpuric fever may have originated, the facts that have come under my notice have convinced me that it has been communicated and extended by contagion. To detail all these facts would extend my observations to an unnecessary length.

14. Gastro-purpuric fever appeared as an epidemic for the first time shortly after the establishment of meal stores in districts previously pretty healthy.

15. Notwithstanding the exposure of many of the wealthier classes, as poor-law guardians, members of relief committees, &c., to the contagion of gastro-purpuric fever, it has not in general been developed amongst them; but such of them as have been attacked with fever have usually exhibited the fourteen-day maculated typhus.

16. Persons placed in somewhat the same condition as the wealthier classes, except as to the habitual use of meat diet, have usually, when attacked, exhibited the gastro-purpuric, and not the typhoid form of fever. This class includes artisans and tradesmen in good employment.

17. From the two preceding observations it would appear, that the habitual use of animal diet has been more or less preventive of gastro-purpuric, but not of typhus fever.

Bright's Disease on the Kidney.—In April last, (see Monthly Journal Med. Sci. for May,) Dr. Gairdner read a paper on the nature of this affection before the Med. & Chi. Soc., of Edinburgh. In a discussion on the subject of the paper, Drs. Bennett, Paterson, Gairdner and Prof. Simpson took part.

The object of the paper was to show, that the symptoms usually considered as indicating Bright's disease, are not found in connexion with one pathological lesion exclusively, but may be the result of several disorganizing processes. The author described the pathological lesions of the kidney as being essentially the same as those of other organs, the differences being the result of the anatomical disposition of the gland. The deposition of fatty granules might occur in connexion either with acute or chronic forms of disease. Instances of its acute deposition are to be found in pneumonia, and other parenchymatous inflammations, where the so-called exudation corpuscles have exactly the same mode of origin from the ephithelium of the lung, as the fatty cells in the parenchyma of the kidney. Neither could the granular or fatty exudation be considered as the proximate cause of albuminuria or dropsy; as it might occur to a considerable extent without either of these consequences. Albuminuria was generally connected with imperfect formation of the secreting cells, and very frequently with desquamation, as described by Dr. Johnson, Mr. Simon, and others. Dr. Gairdner pointed out the analogy of this morbid process with the ordinary phenomena of mucous inflammations, as described by Henle. This he was disposed to consider as the initiatory process of Bright's disease; it might be succeeded by exudation, or by other pathological lesions, according to circumstances. The granulated kidney, the non-granulated (fatty) kidney, and a peculiar waxy degeneration, corresponding with the "marbled" kidney of Rayer, were described by the author as frequent in connexion with Bright's disease. The result of most of these forms of disease was atrophy and contraction, which occurred by the absorption of the exudation, and collapse and obliteration of the tubes.

Dr. Hughes Bennett stated, that he had on several occasions examined the demonstrations of Dr. Gairdner, and could vouch for the accuracy of the facts he had described. Some of those, more especially such as were explanatory of the changes occurring in the tubes after the evacuation of their fatty contents, were new, and constituted a valuable contribution to our knowledge of the morbid anatomy and pathology of renal disease. The observations of Dr. Gairdner, as well as those of several German pathologists, and of Dr. Johnson of London, as regards fatty degeneration of the organ, were illustrative of a series of changes which occurred in numerous glands, and exhibited the great importance of paying attention to accumulation of the fatty element as a cause of disease. There could be but little doubt that exudation into the tubes was one of the primary changes in the kidney, whereby, as the author had explained, secondary effects were produced on the Malpighian bodies and the capillaries. It was in recent cases, more especially such as occurred during or subsequent to scarlatina, that fibrinous moulds of the tubes were most frequently found in the urine, which could only be regarded as the natural excretion of the morbid product. They were analogous to the fibrinous moulds of the bronchi, expectorated in pneumonia. Dr. Bennett considered that the good effects of diuretics in certain cases of kidney disease, might be explained by the increased secretion of fluid favoring the expulsion of these moulds. In other cases, again (which further observations could only more particularly indicate,) diaphoretics were of great service, owing apparently to the well-known sympathetic connexion existing between the skin and all mucous membranes, but especially those of the kindey.

Professor Simpson stated, that he was much interested in this subject from the frequency of albuminuria in pregnant cases. Disease of the kidney led to the absorption of urea, and a train of nervous symptoms of the utmost importance. He related several interesting cases of these, and especially one in which the urine remained albuminous for four months, and, after every thing had failed, was cured by diaphoretics. The discovery of the fatty nature of the disease was very important, and its frequent occurrence in cases of pregnancy might be explained by the circumstance, that milk was often secreted and circulated in the blood long before parturition.

Dr. Paterson asked, whether the albumen found in the urine was secreted in the tubes, or was poured out from the blood, and how the hæmaturia, which was so common a symptom in Bright's disease, was occasioned?

Dr. Gairdner said, in reference to the remark of Dr. Bennett, that he had thought it right to be very cautious in drawing therapeutical inferences from a pathology which was still in its infancy. It had been attempted by some writers on this subject, to deter the profession from the use of diuretics in the desquamative forms of the lesion; whereas these remedies were undoubtedly found useful in some cases, in which he believed their action was precisely similar to that of expectorants in catarrh and bronchitis. He had seen comparatively few cases of the temporary albuminuria described by Dr. Simpson, owing to his observations having been made in hospital practice. He considered the albuminuria undoubtedly a morbid secretion, and thought that the hæmaturia was generally seen where there was little of the fatty exudation.

—

Open Foramen Ovale, and its Connexion with Cyanosis. — By Dr. Mayne of Dublin.—The author founds his observations on a very rare and remarkable case, of which he gives a detailed account. The foramen ovale in this case was so large as to allow a half-crown piece to pass with ease, and there was no Eustachian valve. The left auriculo-ventricular orifice was contracted so as barely to admit the points of two fingers, and the mitral valve was shortened so as to permit of regurgitation. These lesions were accompanied by immense hypertrophy of the right ventricle, with enlargement of the right orifices, and dilatation of the pulmonary artery and veins; while the left ventricle was very much diminished in thickness and size, and all the great vessels of the systemic circulation were diminished in calibre; the abdominal aorta admitting the little finger with difficulty, and its arch and the venæ cavæ being contracted in proportion. The valves of the aorta and pulmonary artery were healthy. The right auricle (which received the contracted venæ cavæ) was considerably dilated; the left auricle (into which the dilated pulmonary veins entered) was of natural size. There was apoplectic engorgement of the lungs.

The symptoms of these remarkable lesions were dyspnœa and palpitations on exertion, cough, and perpetual sweating. There was great indisposition to exertion, and the patient (a female) declared that death would be the consequence of any attempt at exercise. The quantity of food consumed by her was so small as to excite general surprise; she did not, however, become very emaciated even at the close of her life. The chest was examined frequently during two years, and always with the same results. There was extended dulness in the cardiac region, and a bruit heard over a limited space in the neighborhood of the fourth costal cartilage on the left side; this bruit was inaudible both at the apex and in the line of the aorta. The rhythm of the heart was natural. The respiratory sounds were every where excessively feeble, and this character was constant. At no time during the progress of the case, had the patient been affected either with dropsical symptoms or with cyanosis. She died suddenly at the age of twenty-nine, a few hours after a trifling exertion.

Dr. Mayne remarks that, in this case, the obstruction at the left auriculo-ventricular orifice must have caused the current of blood to pass by the open foramen ovale from the left into the right auricle, instead of from the right to the left, as is usually the case. The absence of cyanosis is thus readily accounted for; instead of the pulmonary blood being partially circulated in the systemic vessels, the converse was the case, and the system was robbed of already-aerated blood, a portion of which passed through the lungs a second time. The large size of the pulmonary vessels, and the diminished calibre of the systemic trunks, is evidently explained by this state of the circulation; and the feebleness of the respiratory murmur, may perhaps be owing to the circumstance, that a certain portion of the blood passing through the lungs had already undergone aeration, and therefore, a small supply of air was requisite for the completion of the process.

The occurrence of contraction of the left orifice of the heart, in connexion with congenital patency of the foramen ovale, is rare in comparison with contraction on the right side. The latter condition is the most frequent cause of cyanosis.—*Dublin Quarterly Journal*, Feb. 1848.

Rupture of the Chordæ Tendineæ of the Tricuspid Valve.—By Dr. R. B. Todd.—This unusual lesion occurred in a man aged twenty-one, who died in King's College Hospital, London. Three years before admission he had been stabbed in the right side in a riot, and suffered great alarm; after this he had a pleuritic attack, for which he was largely bled. From this time till admission, he had frequently passed large quantities of blood by stool and by vomiting. General anasarca had existed for a month before admission.

The liver and heart presented signs of enlargement on admission; there was crepitation, with feeble respiratory murmur in the back; the breathing was rapid; the pulse small and compressible. There was a loud systolic murmur at the apex of the heart, and over the sternum; also another less loud (probably anemic) at the base, which was prolonged into the aorta. The second sound was feeble. The patient died, five days after admission, of increased dropsy and dyspnœa.

The lesions in the heart were confined to the right side, which presented considerable hypertrophy, with dilatation. The anterior division of the tricuspid valve lay loose in the cavity of the ventricle; the chordæ tendinæ were torn across; and the musculi papillares, from which they sprang, were shrunk and atrophied. The ends of the ruptured tendons were swollen into little knobs, like the swollen ends of the nerves of stumps after amputation. There was no thickening of the lip of the valve. The aorta and its branches were small.

The state of the musculi papillares and tendinous cords shows the lesion to have been of considerable duration. It appears not impossible that it may have originated at the time of the riot. The united influences of fear and of a struggle might cause a temporary check to the respiration, sufficient to account for impeded circulation in the lungs; and hence the blood in the right side of the heart would be driven back upon the auriculo-ventricular orifice and its valve, causing a violent strain upon the latter. The hæmatemesis and the enlargement of the liver probably arose from the same condition; viz. engorgement of the systemic venous circulation consequent upon the regurgitation. The state of the veins of the neck could not be determined, owing to the anasarca. The stethoscopic examination was also necessarily very incomplete.—*Ibid.*

Cerebral Congestion; its relations with Hemorrhage and Softening of the Brain.—By M. DURAND FARDEL.—The following conclusions are arrived at by M. Durand Fardel, in a memoir upon this subject read to the Academy of Medicine in Paris. Cerebral congestion terminates almost always in one of three ways. It is dissipated spontaneously, or as the result of a proper treatment, or it leads to cerebral hemorrhage, or ramolissement. The state of the walls of the cerebral vessels, the existence of a partial alteration of the nervous pulp, consisting in a sort of rarefaction of tissue, the presence of anterior lesions of the cerebral substance, such as cysts, cicatrices, &c., can, without doubt, exercise some influence relative to such or such a result of cerebral congestion. It may be established in a general manner, that advanced age, in concentrating all the physiological activity of the economy towards the brain, or towards the chest, constitutes one of the most powerful predispositions to sanguineous fluxions, to hemorrhages, and to inflammations (ramolissement) of the brain, as it may be seen on the other hand equally to predispose to hyperemias and phlegmasias of the pulmonary organs. If it be true that cerebral congestion plays a principal part in the preparation and production of two of the most common and serious affections of the brain, it follows that the most positive indications exist with regard to the time at which art may interfere, and the hygienic and therapeutic means which ought to be employed in these dreaded affections.—*Month. Jour. Med., from Gazette Médicale*, May 3, 1848.

Jaundice of New-born Infants. By M. HERVIEUX.—M. Hervieux, in a recent thesis, has endeavored to supply a more correct account of this disease than that hitherto given, derived from his observation of forty-five cases. He rejects the various divisions of the disease made by authors, as so many hypothetical suppositions, derived from observation of what occurs in the adult; and recognizes but one form always appearing during the first month, and attended by the same symptoms and morbid changes. He combats the opinion of M. Leger, that the *induration of the cellular tissue* is always accompanied by jaundice; for in ninety cases of this disease, jaundice only manifested itself thirty-one times, and in forty-five cases of jaundice the induration has also been met with but thirty-one times, showing a coincidence, but not cause and effect. He also denies that *enteritis* is a cause, although a common complication of this as of other diseases of this age. Nor does he admit the engorged or inflamed state of the *liver* as any other than an epiphenomenon, nowise connected with the yellow color of the skin. Still it is from the disorder in the functions of this organ in its transition from an organ of hæmatosis to one of biliary secretion, that the icterus arises.

His anatomical observations on the disease lead him to conclude—1. That all the organic tissues are in different degrees liable to the icteric effusion. 2. The intensity of color which these tissues acquire is in direct proportion to the amount of their vascularity. He enumerates the various structures; but we will not follow him here, merely observing that the bones, ligaments, and cartilages were, in a certain number of cases, undoubtedly colored, the sclerotica, however, being found so only once. Not only were the serous and mucous membranes colored but the fluids they secreted likewise. The biliary apparatus was found to have undergone just the same changes as it does in scleroma or enteritis—the so-frequent complications of icterus—but neither the biliary ducts nor umbilical veins presented the marks of inflammation described by some. The yellow patches in the parenchyma of the kidney, described by Billard, were of two sorts, the one arising from icteric effusions, the other of a far brighter color, unconnected with it. The respiratory apparatus furnishes evident marks of color; but the *nervous system*, and the *brain* in particular, were intensely colored in thirty-one cases. The hue of the skin is often modified into a coppery or orange color, by its co-existing vascularity. The conjunctiva, contrary to what has been stated, is *always* colored, as is also the gingival mucous membrane, and that lining the lower surface of the tongue. The author has never detected the coloring matter in the *urine*, as seen in adults, or a decolored state of the fæces. The disease commences with the conjunctiva the second or third day after birth, and goes through all its stages in six or seven, or at most fifteen days; exists very rarely beyond the twentieth, and never beyond the thirtieth, day. Its complications (from which alone arise any danger in this affection) are purely accidental, being mere coincidences. In these forty-five cases such complications consisted of scleroma thirty-one times, enteritis fifteen times, muguet five times, pneumonia twice, purulent ophthalmia ten times. M. Hervieux, regarding simple icterus as rather the sign of a new function temporarily exceeding its physiological limits, than as a disease, recommends that the case should be left entirely to the resources of nature.—*L'Union Médicale*, 1847, No. 154, *and British and For. Med. Chir. Review*, April, 1848.

On Certain Forms of Alkaline Urine. By Dr. G. Owen Rees.—In a case of extrophy of the urinary bladder, Dr. Rees had an opportunity of observing the condition of the urinary secretion before and after contact with the mucous membrane of the bladder. He found that, when tested as it flowed from the extremities of the ureters, it had a normally acid re-action; but that as it trickled, drop by drop, over the mucous membrane of the bladder, it became rapidly alkaline, from the admixture of a copious alkaline mucus which was secreted from the exposed membrane. Dr. Rees conceives the alkaline secretion to be thrown out for the protection of the irritable membrane of the bladder, and thinks that a certain number of cases of alkaline urine are due to the stimulating effect of an originally acid secretion upon the genito-urinary mucous membrane, which, from some cause, secretes an excessive quantity of alkaline fluid. He explains the effect of alkaline remedies, in some instances, in removing the alkalinity of the urine, on the supposition that the urine as secreted, being reduced nearly to the neutral condition, is thereby deprived of all irritating properties, and is enabled to pass over the genito-urinary mucous membrane without exciting any alkaline discharge to affect its properties secondarily. The distinction between such cases of alkaline urine and others, is only to be affected by attention to the history and symptoms, and by chemical and microscopical examination of the urine.—*Medical Gazette*, April 7, 1848.

Diseased Conditions of the Mitral Valve.—Incompetency of this valve is generally accompanied by narrowing of the auriculo-ventricular orifice. The valvular lesion under consideration is not unfrequently accompanied by a pseudo-chlorotic state, distinguishable from true chlorosis by the concomitant enlargement of the spleen. In these cases the patients complain of pains in the shoulders, which, according to Jaksch, persist until the system is improved by the use of chalybeates. Jaksch, mentions the cases of three individuals who, from early youth, had labored under this affection of the valves, and in whom the phthisical constitution ultimately became developed. He attempts to explain the presumed connection between these diseases, by supposing defective nutrition, owing to the imperfect manner in which blood is propelled through the aorta.—*Month. Jour. Med. Sci. for May,* from *Hannoverische Annalen,* 1847. *Clinical Notes taken in the Hospital of Prague.*

Diseased Conditions of the Aortic Valves.—Incompetency of these valves is constantly attended by large arterial pulsation. In simple contraction of the aortic orifice again, while the systole of the heart is of longer duration than in the former case, the pulse is almost always small and filiform. When the heart's action, however, is sufficiently slow to allow a tolerably ample current of blood to flow through the contracted orifice, the pulse may be fuller.—*Ibid.*

Pericarditis.—It is important to notice that the pains accompanying chest diseases are often referred by the patient to situations inferior, in point of position, to those organs actually affected. This accounts for the frequency of liver affection as a clinical disease, and the rarity of its detection on post-mortem examination. The pains of pericarditis are mostly referred to the scrobiculus cordis or hypochondrium. In one case where Jaksch, misled by these symptoms, diagnozed inflammation of the diaphragm, copious pericarditic effusion was found after death.—*Ibid.*

Endocarditis.—Depositions in the spleen almost always accompany endocarditis, and these correspond in character with the endocardial exudations, being purulent if the latter are purulent, and so on. Jaksch states, that the endocarditis following acute rheumatism, very frequently gives rise to empyæmia. That the formation of aneurism may sometimes be induced, when the texture of the heart has been weakened by carditis or endocarditis, appears evident from the details of a case, in which inflammatory exudation on the lining membrane of this organ co-existed with inflammatory softening of its whole structure at the apex, and in which, at this point, a considerable degree of attenuation had taken place, which might, no doubt, after some time, have gone on to rupture.—*Ibid.*

Perforating Ulcer of the Stomach.—Of the patients laboring under this disease, noticed by Jaksch, 33 had acute tubercle of the lungs, 26 chronic tubercle of the lungs, and 43 pneumonia. He therefore presumes that some relation exists between the affection in question and diseases of the lung. The same physician gives the following sketch of the symptoms commonly observed with this kind of ulceration. After intense mental or bodily exertion, or the use of some stimulating liquor or article of food, the patient complains of violent pain, extending upwards from the pit of the stomach, which often disappears after vomiting. The tongue still remains clean, the appetite is variously altered, and the bowels are for the most part obstinately costive. Sometimes the symptoms assume more of the character of those which accompany mucous gastritis. There is a dull, persistent pain in the epigastrium, pyrosis, indigestion, vomiting, and tumefaction of the abdomen. Jaksch, in speaking of the treatment of these cases, recommends the use of milk, veal-soup, and chicken-soup as articles of diet. He also recommends, as palliative remedies, leeching and counter-irritation of the epigastric region, anodynes, the acetate of lead, and iron.—*Ibid.*

—

DR. HUGHES BENNETT *on the Treatment of Phthisis Pulmonalis by Cod Liver Oil.*—The effect of the oil in many cases of phthisis is very striking, and is well seen in hospital and dispensary practice. Individuals presenting emaciation, profuse sweats, constant cough and expectoration, as most prominent symptoms, with a degree of weakness that prevents their standing alone, after a few weeks' use of it are enabled to get up with ease and walk about, with a visible improvement in their general health, and an increased amount of flesh. The physical signs of the disease may continue unaffected for some time; but if the treatment be continued, the moist gurgling râles are exchanged for dry blowing sounds, which become more and more persistent, pectoriloquy is merged into bronchophony, the respiration is easier, and a check is evidently given to the ulcerative process, and the formation of purulent matter in the air-passages. In this state, patients often feel themselves so well that they insist on leaving the hospital, or give up their attendance on the dispensary. Dr. Bennett has frequently found it impossible to prevail on such persons to continue the treatment, and the consequence is, that, again returning to their often unhealthy employment and bad diet, and exposed to the other causes favorable to the production of the disease, the distressing symptoms again recur. Several cases with one or more caverns in the lungs, have in this manner returned to the Infirmary from four to seven or eight times during the last six years, and on each occasion have gone out in their own opinion perfectly cured.

Notwithstanding the difficulties which have presented themselves in bringing about a complete cure of the disease, Dr. Bennett has succeeded, in several cases, in ascertaining that caverns have completely healed up, every symptom and physical sign indicating their presence having disappeared, and only slight dulness on percussion, and increased vocal resonance remaining as a proof of the puckering and induration of the pulmonary parenchyma attendant on the cicatrix. He gives two unequivocal cases where this occurred, and alludes to others which he purposes publishing at some future time.

Most cases of phthisis pulmonalis, especially in the advanced stage, are affected with more or less dyspepsia, which renders the stomach irritable, causes total loss of appetite, and is often the cause that prevents nourishment from being taken. In many instances there is no difficulty in employing the oil under these circumstances, but in others it cannot be retained on the stomach. It will then be necessary to calm the irritability of the organ, and the best remedy for this purpose, according to Dr. B.'s experience, is naphtha. It is to the power this substance possesses of checking vomiting, and thereby allowing nourishment to be retained, that he attributes the advantages which have attended its use in the practice of Dr. J. Hastings, and others. The diet should always be nutritive, without being stimulating; and counter-irritation to the chest is an excellent auxiliary. This treatment should be perseveringly persisted in; whilst, to prevent fresh exudations of tubercular matter, an equable temperature is of the highest importance. To equable temperature must be ascribed the advantages of favored localities for phthisis, and with proper precautions it can be very well maintained in this climate.—*Bennett on Cod Liver Oil.* Edinburgh, 1848.

—

Cause of Œdema of the Lower Extremities.—In the May No. of the Medical Examiner, is an interesting letter from F. W. Lewis, M. D., written from Paris, in which he details the recent investigations of M. Piedagnel, concerning the cause of the œdema which so frequently occurs in one or both lower extremities, during the progress of phthisis, and other chronic diseases, that give rise to great emaciation. He attributes the dropsical infiltration, to the positive obstruction of the primitive iliac or femoral veins by direct pressure. Thus in the latter stages of phthisis or other chronic visceral disease, the fat that usually surrounds the vena cava and its primitive branches, becomes absorbed, allowing them to rest directly against the spinal column. This is particularly the case where they pass over the third and fourth lumbar vertebræ. And it is here, that the primitive iliac arteries usually lie directly over or obliquely cross the veins of the same name ; and if by the removal of the fat, these latter rest directly against the unyielding vertebræ, they will certainly be more or less obstructed by the pressure of the arteries. The fact that such obstruction does take place under the circumstances named, and is the efficient cause of the partial œdema he fully proves by numerous post-mortem examinations. These examinations also explain why the left limb so much more frequently becomes the seat of dropsy than the right, viz: because the left iliac vein is almost always crossed by the arteries, while the right not unfrequently runs parallel with its corresponding artery, without being crossed by it. M. Piedagnel sometimes found the obstruction in the femoral veins produced by indurated inguinal glands, while the iliac veins were free.

SURGERY.

Ununited Fractures, treated by Subcutaneous Puncture.—Prof. Miller, in May last, read before the Med. & Chir. Society of Eding. (see Month. Jour. Med. Sci., for June,) a paper on this subject—five cases are given illustrative of its value. The operation consists in passing the point of a needle or small tenotomy bistoury, down upon the ends of the bone and freely irritating the surfaces at several points, care being taken not to wound important arteries in the vicinity.

In speaking of the bearings of the cases related, and the different methods which have been resorted to or suggested, Prof. Miller remarks:

> As already stated, I am aware that these cases bring no conclusive evidence in favor of the practice in question. They have done enough, and all that is expected of them, if they persuade any of my professional brethren that there is "something in i ," and lead them to lend their aid in bringing that to the decision of practical experience.
>
> It is surely better—though somewhat like—the practice of John Hunter; whose treatment of an ununited fracture of the humerus, Mr. Samuel Cooper tells us, was as follows:—"There was an artificial joint, and he made an incision into it: and then, having introduced a *spatula*, he irritated the whole surface of the artificial joint. This brought on considerable inflammation, which ended in anchylosis, and the patient was cured." The subcutaneous puncture and the needle, if they are likely to obtain the same ultimate result, are surely preferable to the incision and the spatula. White's severe operation of cutting down, and sawing off the ends of the bones, was not only hazardous to life, but not unfrequently failed to accomplish the end in view; in some cases it proved fatal. Dr. Physick's seton is less formidable than the saw; but chance of failure with it is not slight; and in fractures of the lower extremity, indeed, its success may be regarded as only the exception to the

general rule. Mr. Amesbury's pressure has not come into vogue; but is rather looked on as painful, irksome, and uncertain. Of Dieffenbach's pegs I have no experience; but I am quite sure that the insertion of them must in most cases prove difficult, and their presence in many dangerous. Lately Mr. Burman has employed galvanism as an exciting agent, and with success, in the case of an ununited fracture of the tibia of fourteen weeks' duration. There were other means at work, however; namely, an improved diet, and constant firm pressure on the fractured ends. It may have been the galvanism alone that moved the plasma and its organization; but many perhaps will be inclined to rank that agent rather as an adjuvant than as a principal. To the method by subcutaneous puncture it might prove a powerful auxiliary. The simultaneous use of both is not incompatible; and, in these days of chloroform, the frequent repetition which either may require, cannot be considered as cruel and objectionable. From neither, conducted with ordinary prudence, can risk of untoward casualty be suspected.

Of course, in no case is local treatment exclusively to occupy our attention. Constitutional management must never be overlooked; and often it proves of the highest importance.

Surgical Treatment of Solitary Neuromatous Tumors.—In the Dublin Jour. of Med. Sci. for May, 1848, Mr. Adams, (as related in the Proceedings of the Dublin Pathological Society,) has given the particulars of three cases of neuroma, at the close of which he makes the following remarks.

Although we might well imagine that the proper surgical treatment which these *solitary* neuromatous tumors require, was a point of practice long since settled, and that therefore, the cases just adduced, have lost much of the interest which should otherwise attach to them, yet I am of opinion that the multiplication of facts proving the safety and success with which painful neuromatous tumors may be excised, cannot be considered altogether useless, since MM. Louis, Odier, and Warren state, that they have deemed it necessary to amputate limbs affected with this disease. Indeed, if we were not acquainted with the historical evidence of the advantage of excision of neuromatous tumors, and the cutting the nerve from which they spring, or had not witnessed results so happy as those which occurred in the last two cases I have adduced, we could scarcely credit that the operation of completely dividing across such a nerve as the median, or posterior tibial (necessary for the removal of the neuroma), should be followed only by some little temporary inconvenience.

It has now been fully ascertained, by the result of positive experiment on man, that neither loss of sensibility nor of power of voluntary motion ultimately remains, after cutting completely across such nerves as the ulnar, median, musculo-cutaneous, and posterior tibial, and perhaps some others. By such results, we should, I imagine, be encouraged, in the surgical treatment of neuromatous tumours, such as the foregoing, to prefer the cutting across of the nerve, and the excision of the neuroma from which it springs, to any other mode of operation.

We learn, however, that some surgeons have in particular instances considered it more expedient to endeavor to disentangle the neuroma from the branches of the nerve which surround it, than to resort to the complete excision above alluded to.

We read that Velpeau, in a case of a very large neuroma of the sciatic nerve, safely disengaged the tumor from the lash of branches, or fibrillæ, of which this great nerve is made up. He adds, that Chelius of Heidelberg adopted the same plan with similar success. Upon the whole, from what I have seen of those painful neuromatous tumors, I would say the *rule* should be to cut across the nerve above the neuroma, and then remove the tumor; but there may be cases in which it may be practicable, and, perhaps, prudent without sacrificing the nervous trunk by division, to dissect out the tumor from the nervous fibrillæ which surround it.

Strangulated Congenital Hernia in an Infant—Operation—Cure.—Mr. Ferguson, in the Dublin Jour. of Med. Sci. for May, 1848, reports a case of strangulated congenital hernia in an infant seventeen days old. The hernia was confined to "the region of the left inguinal canal." The symptoms unequivocal, the operation was performed as the last resort in the usual manner, the relative anatomy normal, and the recovery of the patient perfect. Mr. Ferguson closes his paper with the following remarks:

> I have never myself seen the operation for strangulated hernia performed on any patient under the age of puberty, excepting in this instance, and few surgeons have had occasion to use the knife in infants thus affected. Mr. Adams, of Dublin, having operated successfully for strangulated congenital inguinal hernia on an infant eighteen months old, thought the case worthy of being recorded; and states, in his paper on the subject, that the only example of a successful proceeding of the kind which he has found recorded, had happened to Mr. Long in St. Bartholomew's Hospital, in a child only fourteen months of age. Mr. Lawrence has referred to Mr. Long's case, as an instance wherein, at this early age, the hernia was not of the congenital sort, for the tunica vaginalis testis and hernial sac were quite distinct. Mr. Stanley, we are told by Mr. Lawrence, has operated successfully on an infant of seven months,—and here too, the hernia was not congenital. Several other examples are referred to by Mr. Lawrence, in his Treatise on Ruptures, where strangulated hernia had been present in very young subjects, some having died without operation, others having been operated on successfully, and one, a child of six months, having died of profuse diarrhœa in forty-eight hours afterwards. Mr. Curling has politely mentioned two cases to me: one occurred to Mr. Luke, in a child three months old; an operation was performed, the hernia was reduced without opening the sac, and the patient recovered. The other was an instance operated on with success by Mr. Hawkins at St. George's Hospital, at the age of seven weeks. Mr. Lawrence has given some particulars of a case which happened to Dupuytren: an operation was performed on an infant twenty days old, but the result is not mentioned. Among the various professional friends whom I have met recently, I have not found that any of them were acquainted with an instance of an operation having been performed at an age so early as that of the patient whose case I have here recorded.

Gonorrhœal Ophthalmia.—In his lecture upon syphilitic diseases, lately published in the Lancet, M. Ricord recommends the application of the solid nitrate of silver to the affected surface, so as to produce a white film, but not to destroy the tissues; after which he advises the thorough irrigation of the part, in order to wash off any portion of the salt which may adhere. By this means, he says the secretion is momentarily suspended, but when the crust formed by the caustic falls off, the pus re-appears, though it is then lighter in color and turns sero-sanguineous. "So long," he says, "as little white streaks, the result of the cauterization, remain visible, and so long as the secretion is not again purulent, you may judge that the influence of the nitrate is continuing; but when the streaks have disappeared, and the secretion re-assumes its primary character, you may infer that the effects of your cauterization are over, and you may then repeat it; indeed it can safely be used three times a day." He thinks that mercurial friction in the early stage of the disease rather tends to increase than diminish it. When chemosis ensues, he advises its immediate incision; at the same time he thinks that the cauterization should precede the incision. It is in the early stage of this symptom, and when it is merely the result of œdema, that he thinks most benefit can be derived from it, but "when the chemosis has reached the phlegmonous state, it can no longer be excised, you must then have recourse to scarifications, but their effects are very inferior to those of excision. In the interval between the cauterization with the solid nitrate of silver, I inject into the eye, three or four times a day a weak solution of the same salt." M. Ricord also depletes largely, both generally and locally. While we agree in the general rules laid down for the treatment of this disease by the distinguished author whom we have just quoted, we confess our dread of rubbing the coats of the eye three or four times a day with the solid nitrate of silver. Upon the subject of the treatment of the urethral discharge, during the continuance of the ocular affection, M. Ricord's observations are worthy of attention. The urethral discharge, he says, no doubt diminishes, but never altogether ceases, when the eye is engaged. He objects to taking pus from another individual in order to reproduce the urethral discharge, because, as he justly says, there may be latent chancres in the urethra which yields the pus, and then an additional misery might be entailed. When the ocular disease has been communicated from the urethral discharge of the same person, he uses copaiba "in order to control the urethritis, as in so doing I remove the chance of relapse as regards the eye." (*Dublin Jour. Med. Sci.*)

—

Œdema of the Glottis.—Dr. Jameson, in the Dublin Jour. of Med. Science, for February, 1848, reports thirteen cases of this affection produced by boiling water. The operation of bronchotomy was performed in ten, three of which recovered, and seven died, four of bronchitis and pneumonia, one from the shock of the operation, and one from an accident while on the table. In two cases antiphlogistic treatment was resorted to—one recovered, and one died. Dr. J. makes the following remarks:

In all cases where boiling water has been taken, or attempted to have been taken into the mouth, the danger at all times is imminent; for although the little patients seem to suffer comparatively very little for the first few hours, still symptoms of grave importance set in sooner or later, which, if not combatted by appropriate treatment, will either kill the patient or call for the operation of tracheotomy. The operation is, therefore, I think, imperatively called for, when the usual remedies, such as emetics, leeches, and the application of heat to the surface, &c., fail in allaying the urgent symptoms. But when the breathing becomes stridulous and croupy, or amounting to a mere pant, from spasm of the glottis, the pulse quick and small, the temperature of the body diminished, the head drawn back, face congested, eyes half open, inclination to coma, and difficult deglutition, I should, on the first accession of these symptoms, at once be inclined to operate; but when these have lasted a sufficient length of time to cause complete coma, or if bronchitis or laryngitis has set in, then, I think, it will be found useless; for when patients under such circumstances die after operation, provided it is not produced by the shock inflicted on the nervous system, it is from the accession of bronchitis, laryngitis, or pneumonia; consequently, if any of these exist before we operate, we can entertain but small hopes of recovery.

The following cautions, Dr. J. thinks should be observed in cases where the operation is resorted to:

1st. The operator should bear in mind that his cutaneous incision be in the median line, otherwise the opening into the trachea will not correspond to it, a valvular opening being the result.

2d. Great caution is required in avoiding the thyroid veins, which, as well as the middle thyroid artery, constantly encroach on the median line.

3d. Great caution is required that the incision be not carried too low in the neck, thereby opening the fascia that is attached to the sternum, which helps to close the upper opening of the thorax, like a lesser diaphragm, whereby there is not only danger of wounding the vena innominata, but also great annoyance may be experienced in the subsequent steps of the operation, by the elevation and depression of the thymus gland.

4th. We should never open the trachea till we are certain that we have laid open the deep fascia that covers it, or we will surely have a valvular opening.

5th. The operator should be prepared, in case of the supervention of spasm, when the trachea is seized by the hook, to cut the piece out rapidly ; or should the patient not breathe instantly after this has been done, the surgeon must lose no time in passing a gum elastic catheter into the trachea and inflating the lungs.

6th. We should never enlarge the wound in the soft parts after the trachea has been opened, lest a flow of blood should pass into it, and cause the instant death of the patient.

7th. Blood may pass into the trachea the instant the opening is made into it, thereby producing violent cough, or even to such an amount as to asphyxiate the patient. In either case, the elastic catheter must be had recourse to, and life may be saved.

8th. Should a lymphatic gland present itself along the course of the incision, and tend to obstruct the passage of air into the trachea, it may be removed without danger.

Guides for Performing Partial Amputations of the Foot. By M. Heurotay. —The author does not consider sufficiently explicit the directions given to find the articulations in the partial amputations of the foot, which were suggested and practised by Chopart and Lisfranc, and he gives the following measurements to guide the operator in these disarticulations :—If the inner border of the foot is measured from the heel to the extremity of the great toe, at a point exactly half-way between the extremities of this line, lies the articulation of the first metatarsal bone with the internal cuneiform. Half-way between this point and the extremity of the great toe, lies the articulation between the first metatarsal bone and the first phalanx of the great toe.

Again, to find Chopart's articulation, a line drawn from the articulation of the internal cuneiform with the first metatarsal bone to the extremity of the heel, is to be divided into three equal parts, and at the junction of the anterior with the middle third, is the point where will be found the articulation of the navicular bone with the astragalus.—*Révue Médico-Chirurgicale.*

[These directions, if correct, will be found useful in performing the partial amputation of the *left* foot, as the operator, standing on the left side of the patient, enters the knife on the inner border of the foot. The guides usually given will, however, be found of more importance in operating on the right foot, in which the incisions are commenced on the outer side. The projection of the head of the fifth metatarsal is here easily felt, and is the guide to the tarso-metatarsal articulation. The articulation through which Chopart's operation is performed, lies half-way between this point and the extremity of the external malleolus.]—*Month. Jour. Med. Sci.*

Death from the Admission of Air into a Vein in passing a Seton in Front of the Neck.—On Wednesday, March 29th, an inquest was held before the coroner for East Surrey, to investigate the circumstances attending the death of William Richards, aged thirty-nine, a coal porter.

The deceased had applied to Dr. Willis for advice, a fortnight before the day of his death, on account of laryngitis. Leeches were applied, and blisters, and on the morning of his death, the patient came to the house of Dr. Willis for the purpose of having a seton introduced. He was set in a chair, and the skin being pinched up with the finger and thumb, a seton needle, armed with a strip of lint, was thrust in two inches and a half above the sternum. At the moment of its entrance, Dr. Willis thought he had opened a subcutaneous abscess communicating with the windpipe, as a slight hissing noise was heard. The man instantly became pale and fainted, and then became rigid and convulsed, and it was evident that the hissing noise had proceeded from air having entered a vein. Dr. Cormack from Putney was consulted, and the patient was bled from the arm, which produced temporary amendment; but he died between six and seven hours after the accident.

Mr. Syme, examined at the inquest, concurred in the above opinion as to the nature of the case, and approved of what had been done in the way of treatment. He had examined externally the wound of the seton with reference to the situation of the large vessels, and was satisfied that it was so remote from them, that they could not by possibility be implicated. Dr. Cormack corroborated Dr. Willis' testimony.

The jury returned the following verdict;—"Accidental death from the entrance of air into a vein in the neck during an operation performed by Dr. Willis; but tne jury cannot separate without expressing their opinion, that such operation was cautiously and skilfully performed; and, as it appears by the evidence adduced, the said operation was fully warranted by present practice." —*Prov. Med. and Surg. Jour., April* 19.

Catheterism of the Œsophagus in Cases of Stricture. By M. TROUSSEAU.—This mode of treatment, which was revived by M. Gendron (*Retrospect*, p. 69), is highly recommended also by M. Trousseau, who has seen several cases successfully treated by M. Bretonneau, and publishes two cases from his own practice. He uses a delicate whalebone rod not more than a line in diameter, and from twelve to sixteen inches in length; at either end of this is fixed an olive-shaped dilator, somewhat straitened in the middle, so as to permit of being surrounded by a piece of dry sponge, which is fixed on with sealing-wax, and is made very slightly greater in diameter than the stricture. The sponge is further secured by a thread, the ends of which are left eight inches in length, for a purpose to be presently mentioned. After moistening the sponge with yolk of egg, it is passed beyond the isthmus of the fauces. Traction is then made on the threads, by which means the end of the instrument is made to take the direction of the œsophagus instead of striking the back of the pharynx. So soon as the stricture (which is generally at the level of the larynx) is felt, the instrument is pushed onward, with some force and a rotatory motion, the left hand being used to support the larynx, which would otherwise be pushed down, and would carry the œsophagus with it. It is of importance to pass the obstacle as quickly as possible, otherwise the presence of the foreign body is apt to induce suffocation. When once the passage has been effected, the sponge is again retracted; and this is repeated a second, and perhaps a third time, before finishing the operation. The operations may be repeated twice a-day, gradually increasing the size of the sponge; and, when the passage is so large as readily to admit a sponge of the size of an ordinary bolus of food, the intervals may be much longer. The treatment should be kept up in cases of long standing for several months, or a year; in more recent cases a few weeks are sufficient. M. Trousseau has tried in one case the cauterization by nitrate of silver, as recommended by M. Gendron; but he does not recommend this measure, believing it to be in the œsophagus, as in the case of the urethra, seldom required.—*Révue Médico-Chir.*, March, 1848.

[It is worthy of remark, that almost all the cases of strictured œsophagus in which this mode of treatment has been of service, have been traceable to diphtherite. This may explain the invariably high seat of the stricture. In strictures with loss of substance, as also in many other cases mentioned by Sédillot (*Retrospect*, p. 69), catheterism would be unavailing; and cauterization in such cases would be a very unsafe proceeding.] *Month. Jour. Med. Sci.*

Traumatic Tetanus.—Mr. MacGarvey in the Dublin Jour. of Med. Sci. for Feb. 1848, gives the particulars of a case of tetanus cured by Donovan's tincture of the resin of Indian hemp. The case was one of injury of the "first joint of two fingers of the right hand." Twenty-five drops of the tincture were given every hour for four hours, after which it was given every two hours. On the fourth day it was decreased to ten drops every four hours—recovery was complete on the fifth day.

MIDWIFERY.

Use of Chloroform in Midwifery.—Dr. Edward W. Murphy, of University College, London, has recently published a pamphlet entitled "Chloroform in the Practice of Midwifery," from which we extract the following conclusions:

"1st. It does not interfere with the action of the uterus, unless it be given in very large doses, which is never necessary.

"2d. It causes a greater relaxation in the passages and perinæum; the mucous secretion from the vagina is also increased.

"3d. It subdues the nervous irritation caused by severe pain, and restores nervous energy.

"4th. It secures the patient perfect repose for some hours after her delivery. These three last effects consequently render an operation much easier to perform, and the recovery of the patient afterwards much more favorable.

"5th. The order of its effects on the vital functions seems to be—loss of sensation—partial loss of voluntary motion—loss of consciousness—complete loss of voluntary motion—stertorous respiration—loss of involuntary motion—cessation of the action of the uterus—of respiration—of the action of the heart.

"6th. Its injurious effects, when an ordinary dose is given, seem to depend on constitutional peculiarities, or on improper management. Much excitement about the patient may render her violent. Catalepsy has occurred in some; clonic contractions in others. Some patients are slow in recovering from the effect of a large dose; they remain giddy during the day, and sometimes faint when they stand upright."

Removal of Uterine Polypi. Dr. Hamel, Dr. Mitchell, and Dr. Flumiani.—A woman, aged fifty, still menstruating, was the subject of repeated and severe hemorrhage, which she attributed to the period of life which she had reached, and which was making serious inroads upon her general health. On submitting to a vaginal examination, there was found a very large pediculated fibrous polypus; but it was impossible to determine where the pedicle was attached, on account of the narrowness of the vulva, although M. Hamel had incised the hymen to assist him in his exploration. The size of the tumor was such as to render it impossible to bring it out externally without lacerating the vulva. The pedicle was ligatured by the ordinary serre-nœud, and divided in the course of two days, when the softened polypous mass was removed by aid of tenaculum forceps.—*Gazette Médicale de Paris*, April, 1848, p. 269.

Dr. Mitchell's patient was a lady of delicate constitution, who had borne five children, and who was believed to labor under prolapsus of the uterus. On examination, he found lying in the vagina a globular tumor of the size of an orange, with a pedicle of about one-third the thickness of the polypus, and which was encircled by the mouth of the uterus. By the aid of the speculum the pedicle was ligatured by the double canula of Gooch. It was nine days before the pedicle was cut through, and during that time the woman suffered severely from hemorrhage, and other distressing symptoms.—*British Record of Obstetric Medicine*, No. I., Jan., 1848.

Dr. Flumiani's patient was forty-two years of age had been several years married, but had had no children. Till she was forty years of age her health was always good; but then, it began to fail, and she was troubled with repeated uterine hemorrhages. At the same time she felt a tumor rising above the pubes, but did not pay much heed to it. At last, she called in the aid of Dr. Flumiani, who found her complaining of obstinacy of the bowels, frequent hemorrhages, incontinence of urine, and various symptoms of general ill health. On examination, he discovered within the uterus a tumor, smooth on the surface, of an egg-shape, and of the size of the head of a mature fœtus. He at once made deep incisions into its substance, to accelerate its breaking down, and, by this means, he also evacuated some blood contained within it. On the following day he returned to complete the operation. The woman was placed on her back, with the pelvis on the edge of the bed, the thighs separated and supported, as in a case of instrumental delivery. The forceps were introduced so as completely to grasp the tumor. It was then dragged down so low that the pedicle could be felt, which was then cut through with scissors, and the polypus removed. The uterus immediately returned to its natural position. No hemorrhage followed; and the woman, previously in a deplorable condition, regained good health.—*Month. Jour. Med. Science, from Annali Universali di Medicina.*

Observations on the Influence of the Death of the Fœtus in Relation to its Retention in, and Expulsion from, the Uterus.—Prof. Simpson, before the Edinburgh Obstetric Society, (see Monthly Journal Medical Sciences for May, 1848,) deduced the following general laws which regulates the occurrence of labor in relation to the death of the fœtus. 1. That usually, in from one to three weeks after the fœtus died, uterine contractions supervened, and effected its expulsion, but to this very general law there were various exceptions. For, 2. If the embryo died in early embryonic life, and the fœtal appendages continued to live and vegetate, expulsion might not supervene for months. He showed a case of hydatidginous ovum, where the embryo was not larger than an embryo of the sixth week, but the placenta, or rather the chorion, was the seat of hydatidginous hypertrophy and degeneration; and the mother (a patient of Mr. Girdwood's of Falkirk) calculated that she had passed the usual term of utero-gestation, not having menstruated for eleven months previously to the expulsion of this diseased ovum. 3. When the fœtus dies from the third month onwards (in consequence either of disease in its own organization, in its umbilical cord, or in its placenta), and a second twin living fœtus exists at the same time in utero, and this second fœtus continues to grow and keep up a correspondence of development between the organ and its contents, the dead and undeveloped twin may be retained up to the full term of pregnancy, and be then born along with the other living and full-sized child. 4. When the dead fœtus is thus retained, it is preserved free from the decomposition usually following death by all access of air to it being prevented. Sometimes it retains its usually rounded appearance and form if it continues to be surrounded by a sufficient quantity of liquor amnii; but in other cases, where this protecting medium of liquor amnii is defective, the fœtus becomes gradually more and more squeezed between two forces,—viz. the parietes of the uterus on one side of it, and the other living twin or its membranes on the opposite side; and at last, when born, it is found compressed and *flattened* in form. Two such flattened fœtuses are in the University Museum; and many such cases are on record. 5. The birth of such undeveloped dead twins had sometimes given rise to most groundless and erroneous ideas of the existence of superfœtation. 6. Occasionally when one of twins died early in pregnancy, it was after a time expelled (when it happened to be situated near or over the os uteri:) afterwards the uterus closed, and pregnancy went on to the full time with the remaining living child. He mentioned the case of a lady aborting of a fœtus about the third month, going on in pregnancy to the full time, and then being delivered of twins; having originally conceived of triplets. 7. This last circumstance evidently led to the practical deduction,—that when a dead fœtus in its envelopes was expelled during the currency of pregnancy, and the uterus notwithstanding still remained large and apparently distended, its further contents should not be in any way interfered with; but rest and other means employed to avert the excitement of any additional uterine contraction, under the hope that a living twin might still be retained, and be carried onwards to the full term of utero-gestation.—*Ibid.*

Intra-uterine Peritonitis in the Fœtus.—Dr. Simpson showed the body of a new-born infant which had died a few days before birth of acute peritonitis, as evidenced by quantities of coagulable lymph effused upon various parts of the surface of the peritoneum, and more particularly on the surfaces of the spleen and liver. Dr. Simpson stated, that, 1st. Acute and fatal peritonitis appeared to be a very common inflammatory disease in the fœtus in the latter months of utero-gestation. 2d. A large number of fœtuses dying in the seventh and eighth month of utero-gestation, presented, as he had found on dissection, well-marked anatomical evidence of it, in the presence of effusions of coagulable lymph, adhesions between the folds of intestines, pus, &c. 3d. The child was sometimes, though rarely, born alive and affected with it. 4th. Far more commonly the child is born dead, and the previous history of the mother shows that it had perished from one to three weeks before its expulsion, its movements having ceased about that time. 5th. Before the child's movements entirely ceased, the mother very generally remarks that its movements are morbid and excessive for fifty or sixty hours previously—probably during the currency of the fatal disease. 6th. Peritonitis is occasionally apt to recur in successive children in the same mother, and seems in some a result and remnant of the syphilitic poison in the parents. 7th. But in most cases its occurrence is independent of syphilis, and occasionally it will not attack successive children in the same mother, or even both children in cases of twins. In an essay on the disease, published some years ago in the Edinburgh *Medical and Surgical Journal,* Vol. I. p. 392, Dr. Simpson has described a case of twins, in which one was born living and healthy; the other was dead, and within the abdomen were found all the usual appearances following intra-uterine peritonitis. Whilst intra-uterine peritonitis was very common, intra-uterine pleuritis was very rare; Dr. Simpson had only seen two well-marked cases of it in the fœtus.—*Ibid.*

Interstitial Extra-Uterine Pregnancy.—But few cases of this form of abnormal pregnancy are on record. Dr. Payan, of Aix, mentions the case of a woman aged thirty-two, three months advanced in pregnancy, who was suddenly seized with violent pain in the hypogastric region, burning thirst, extreme prostration and syncope, which terminated in death in a few hours. On making a post-mortem examination, the uterus was found covered with a large quantity of coagulated blood. This organ was not larger than in its unimpregnated state; near its fundus was a prominence, in part diaphanous, which had burst, leaving the embryo and its membranes exposed to view. On opening the uterus, its cavity was found enlarged, and lined by an incompletely organized membrane, but containing no fœtus or blood. The cavity containing the fœtus was formed entirely out of the walls of the uterus near its fundus.

MISCELLANEA.

Mortality of Irish Medical Practitioners.—Drs. Cusack and Stokes, in the Dublin Quarterly Journal of Medical Science for August, 1847, and February, 1848, have drawn the attention of the profession and government to this subject. From these papers we learn that the number of practitioners of medicine in all Ireland is computed in round numbers at 2,700, one-fifteenth of whom have died during the year 1847. Alas how little the community are aware of the devotion and sacrifice of the medical profession on the altar of public weal! We subjoin the following deductions drawn by these gentlemen from their inquiries:

1. That the physicians and surgeons of Ireland are, by their profession, more exposed to the influence of fatal diseases than any other class of the community of a similar grade; and that they are at all times liable to these influences, from the period of their entering the profession as students, to advanced life.
2. That few, if any, of the medical profession in Ireland, escape typhus fever; that many have had it twice, and several three times.
3. That the fevers of the medical men in Ireland are almost always of a bad character, even when the epidemic is not of the worst kind; and that, consequently, fever has proved more fatal to medical men than to any other class of the community of a similar grade in this country.
4. That the fevers and other infectious diseases, from which our profession suffers so severely, are generally contracted in the discharge of public duties, either in attendance upon sanitary institutions, or in the miserable, ill-ventilated and dirty dwellings of the poor.
5. That, according to our returns received for the period prior to 1843,—undoubtedly deficient,—568 out of 1220 practitioners in charge of medical institutions suffered from typhus fever; of these, twenty-eight had fever twice, and nine three times; and that, of the whole number, three hundred, or one-fourth, died.
6. That the calculations contained in the papers which we have now laid before the public show that, of 743 deaths of medical men, of which we possess the particulars, 331 were caused by typhus fever, or 1 in every 2.24;—nearly forty-five per cent. of the whole.
7. That, during the prevalence of the late epidemic, 500 Irish medical men, at the lowest computation, suffered from fever or other epidemic diseases, contracted, for the most part, in discharge of public duties, by which themselves and their families have suffered considerable loss.
8. That about one-fifteenth of the entire medical community of Ireland have died during the year 1847.

The Eclectic Practitioners, or the so-called Practical Men.—There are medical men in high positions, greatly occupied with numerous patients, who from a want of study, of intelligence, or of time, from a natural indolence, or from being too old to master recent important improvements, affect a supreme disdain for every thing that concerns doctrine or generalization, either physiological or philosophical. They call themselves PRACTICAL men, and speak ironically of *theorists—men of science* or *of the closet*, such who labor most for the advancement of medical science, and whose knowledge crushes and confounds them. These so-called practical men are those who have no doctrine and no general principles, who gather together ready-made formulæ and isolated cases, without any kind of scientific discernment. The only medicine they study is that contained in small books of prescriptions, published in 18mo. or

24mo. which they carry in their pocket, and know by heart. We have frequently had occasion to remark that a practical man, that is, a man who boasts of knowing nothing of scientific medicine, is a medical machine inferior intellectually to a master-mason, a locksmith, or a cabinet-maker, for these have principles and a sort of doctrine which they apply in their business. They were appreciated in like manner by a learned individual whose authority no one could doubt, and who said,—"The true eclectic works without conviction, without principle, without idea. He is continually enlarging his circle, in order to enclose within it facts of the most contradictory nature—they sacrifice in a sort to every god, and create a kind of scientific pantheism, not less fatal to true science than pantheism properly so-called is to true religion."—*Professor Cruveilhier's Address to the Anatomical Society*, 1845.

On the Discovery of a new Fluid for preserving the Color of pathological and anatomical Preparations. By M. H. Stapleton, M. D., F. R. C. S., M. R. I. A., Surgeon to Jervis-street Hospital.

Sir:—I beg leave to make known to the profession, through the pages of your Journal, the discovery of a solution, which I have employed during the last six years, for preserving pathological specimens. It possesses the important advantages of causing such preparations to retain their color perfectly unchanged, and it does not harden the substance immersed in it. These two results are well instanced in several preparations in Jervis-street Hospital,—in particular preparations of the brain, showing apoplectic clots; apoplexy of the lung, and the recent appearances in stricture of the urethra.

The process I adopt is simply as follows:—In a quart of a saturated solution of alum in water I dissolve half a drachm of nitre; in this fluid I immerse the recent preparation, which soon becomes decolorized, but the color gradually returns within a few days, the period, however, varying in different preparations. When the color is thus completely restored, I put up the preparation in a filtered saturated solution of alum. The specimens are open for inspection

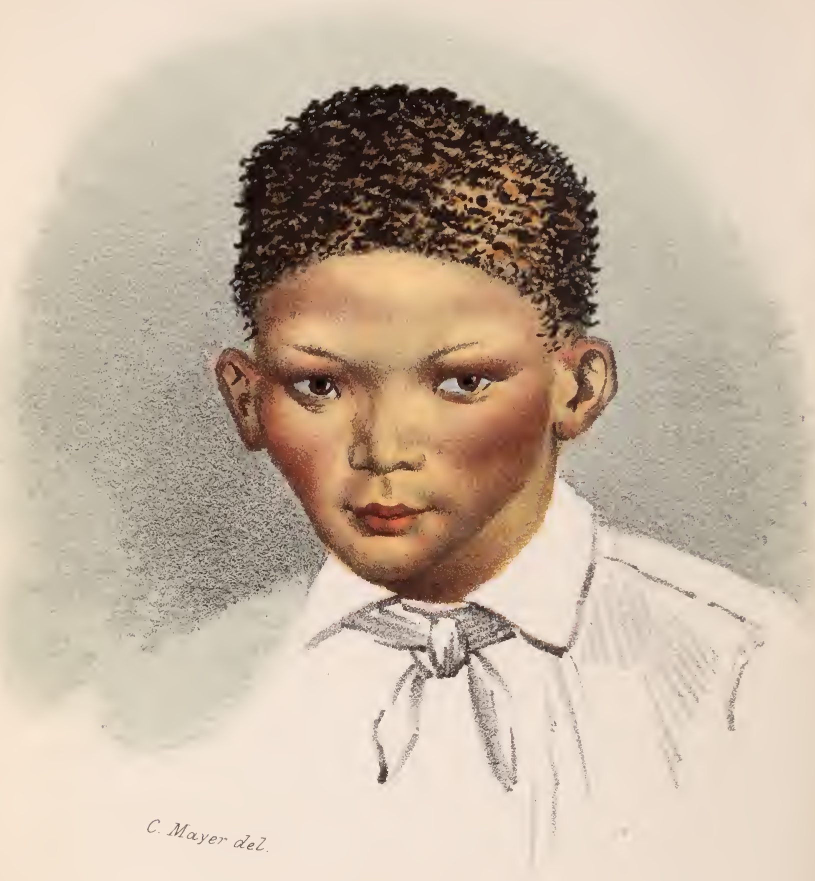
I remain yours, &c. &c.,

16*th January*, 1848. M. H. Stapleton.

To the Editor of the Dublin Quarterly Journal.

Gutta Percha for Artificial Palate.—A correspondent tells us that he has used gutta percha for an artificial palate with entire success. The substance, after some months' use, has proved to be suitable in all respects. In all cases, when the membrane within the nostrils is too tender to bear the sponge, a plate of gutta percha will answer very well—a very thin plate of it not being softened by the temperature of the mouth. It keeps quite clean. From a mould of the parts, the artificial palate of gutta percha can be formed with great ease, requiring very little time and expense. When bones are coming, or have recently come away, and the parts are tender, this substance, as a temporary instrument, will be useful to the surgeon and his patient; and for the number of poor persons who suffer from congenital and other deficiencies of the palate, (much greater than is usually imagined,) and who are prevented from obtaining relief from a truly distressing condition by the expense of gold and platina palates, this application of the Protean gutta percha will be a boon.

A prepared caoutchouc can be easily and firmly attached to the gutta percha when warm. Our correspondent thinks that a soft palate of the former substance applied to a hard one of the latter, would relieve a very large number of those unhappy persons who suffer from fissures and deficiencies of various kinds.—*Month. Jour. of Med. Sci.*



C. Mayer del.

A. Bushman from South Africa.

LITH. BY SARONY & MAJOR, FOR THE NEW YORK JOURNAL OF MEDICINE.

CONTENTS.—No. II.

(NEW SERIES.)

PART I.—ORIGINAL COMMUNICATIONS.

Page

Art. I.—Report upon an Individual of the Bushman Tribe of Hottentots, brought from the Cape of Good Hope, by Mr. Chase, United States Consul at the Cape. By the Committee of the Lyceum of Natural History of New-York, Arthur B. Stout, Woolcott Gibbs, John A. Smith, John L. Le Conte, C. Tellkampf. - - - 151

Art. II.—On the Symptoms, Phenomena, and Exciting Causes of Inflammation. By J. P. Batchelder, M. D. [Read before the New-York Academy of Medicine, September 1st, 1847.] - - - - - - - 157

Art. III.—On Milk Fever, and Abscess of the Mamma. By J. H. Shearman, M. D. - - - - - - 168

Art. IV.—Cases of, and Remarks upon, the Use of Chloroform in Natural Labor. By Edwin B. Stimson, M. D., Resident Physician of New-York Lying-in Asylum. [Read before the New-York Obstetric Society, April 24th, 1848.] - 174

Art. V.—An Essay on the Nature and Curability of Heterologous Tumors. By N. S. Davis, M. D. - - 179

Art. VI.—Of Summary Observations on Syphilis in Infants. By N. H. Chesebrough, M. D., Member of the New-York Academy of Medicine. Member of the New-York Pathological Society, etc. [Read before the New-York Obstetric Society, January 29th, 1848.] - - - - 184

PART II.—CRITICAL ANALYSIS.

Art. VII.—Lectures on the Theory and Practice of Physic. By John Bell, M. D., Member of the American Med. Association, and of the Med. Soc. of the State of Pennsylvania; Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society, and of the Georgofili Society of Florence, &c., &c. And by William Stokes, M. D., Lecturer at the Medical School, Park-street, Dublin; Physician to the Meath Hospital, &c., &c. Fourth edition, revised and enlarged. Philadelphia: Ed. Barrington & Geo. D. Haswell: 1848. 2 vols. 8vo., pp. 784—976. 193

Page

ART. VIII.—A Practical Treatise on the Diseases of Children. By J. FORSYTH MEIGS, M. D., Lecturer on Diseases of Children, in the Philadelphia Medical Association, &c., &c. Philadelphia: Lindsay & Blakiston. 1848. - - 231

ART. IX.—Principles of Medicine: comprising General Pathology and Therapeutics, etc. By C. J. B. WILLIAMS, M. D., F. R. S. Edited with Additions, by MERIDITH CLYMER, M. D. Third American from the second and enlarged London edition, Philadelphia: Lea & Blanchard. 1848. 8vo., pp. 440. - - - - - - - 236

ART. X.—The Influence of Dress in the Production of Disease in Females. By Dr. WILLIAM D. PURPLE, Member of the Medical Society of the State of New-York, &c. [Read before the Chenango County Medical Society, June 10th, 1847.] Albany: Joel Munsel, 1848. 8vo. pp. 11. - 241

BIBLIOGRAPHICAL NOTICES.

ART XI.—An Account of some of the most important Diseases of Women. By ROBERT GOOCH, M. D. With illustrations. Second edition. Philadelphia: Barrington & Haswell, 8vo. pp. 322. - - - - - - 245

ART. XII.—Medical Chemistry for the use of Students and the Profession: being a Manual of the Science, with its Applications to Toxicology, Physiology, Therapeutics, Hygiene, &c. By D. P. GARDNER, M. D., formerly Professor of Chemistry in the Philadelphia College, and of Chemistry and Natural Philosophy in the Hampden Sydney College, Virginia, Corresponding Member of the Lyceum of Natural History, New-York, etc. etc. Philadelphia: Lea & Blanchard, 1848. 12mo. pp. 396. - - - - 245

ART. XIII.—The half yearly Abstract of the Medical Sciences. Being a Practical and Analytical Digest of the Contents of the Principal British and Continental Medical Works published in the preceding six months. Together with a Series of Critical Reports on the Progress of Medicine and the Collateral Sciences, during the same period. Edited by W. H. RANKING, M. D., Cantab., etc., etc. No. 7. January to June, 1848. Philadelphia: Lindsay & Blakiston. 8vo. pp. 358.

The Retrospect of Practical Medicine and Surgery. Being a Half-yearly Journal, containing a Retrospective View of every Discovery and Practical Improvement in the Medical Sciences. Edited by W. BRAITHWAITE, Surgeon to the Leeds Eye and Ear Infirmary, and Lecturer on Midwifery, and the Diseases of Women and Children, in the Leeds School

Page

of Medicine. No. 17. January to July, 1848. New-York: Daniel Adee, 1848. 8vo. pp. 355. - - - 246

Wood's Quarterly Retrospect of American and Foreign Practical Medicine and Surgery. No. 5. July, 1848. New-York: R. & G. S. Wood. 8vo. pp. 64. - - - 246

PART III.—EDITORIAL AND AMERICAN MEDICAL RETROSPECT.

Proceedings of the Third Meeting of the Association of Medical Superintendents of American Institutions for the Insane. - - - - - - - 247
Medical Society of the State of New-York. - - 251

ANATOMY AND PHYSIOLOGY.

Abnormal Distribution of the Thyroid Arteries. - - 252
Corpora Menstrualia. - - - - - 253
The Cerebro-Spinal Fluid. - - - - - 254

PATHOLOGY AND PRACTICAL MEDICINE.

Pathology of the Blood in Inebriates. - - - 256
Dissection of a Fungus Hæmatodes Oculi. - - - 257
Azoturia. - - - - - - - 258
Eczema of the Scalp. - - - - - 258
Anthropo-Toxicologia. - - - - - 259
Hereditary Predisposition. - - - - - 260
Ophthalmia. - - - - - - 260
Pathology of Jaundice. - - - - - 261
Cold Plague. - - - - - - 262
Sloughing of the Intestines. - - - - 263

SURGERY.

Stricture of the Œsophagus. - - - - 264
Statistics of Amputations. - - - - - 265
Medical Treatment of Cataract. - - - - 267
Fissure of the Soft and Hard Palate. - - - 267
Dislocation of the Femur. - - - - - 268

MIDWIFERY.

Labor with Quadruplets. - - - - - 269
Dysmenorrhœa. - - - - - - 269
Treatment of Retroverson of the Uterus. - - - 270
Uterine Hemorrhage. - - - - - 271

MISCELLANEA.

Bell's Diseases of Females. - - - - 272
Beck's Elements of Medical Jurisprudence. - - - 272
Connecticut State Medical Society. - - - - 272

Page
Medical Society of New-Jersey. 272
A New Medical Journal. 273
Obituary. 273

PART IV.—FOREIGN MEDICAL RETROSPECT.

ANATOMY AND PHYSIOLOGY.

On the use of the Pancreatic Fluid. 274
Physical Influence of Capillaries on the Circulation. 275
The Eye Naturally adapted for Distant Vision. 275

MEDICAL PATHOLOGY AND PRACTICAL MEDICINE.

Condition of the Blood-vessels in an Inflamed Part. 276
Contributions to the Statistics of Valvular Disease of the Heart. 277
"Ochlesis," or the Disorder generated by the Accumulation of the Sick. 278
Involuntary Nocturnal Micturition. 278

SURGERY.

On the Causes of Death in Secondary Amputations. 280
Scirrhous Lymphatic Gland. 281
Dislocation of the Head of the Femur on the Dorsum Ilii, in a Child Three-and-a-half Years Old. 281
Dry Gangrene of the Lower Extremity occurring in a Girl ten years old. 282
Fracture of the Neck of the Femur. 282

MIDWIFERY AND DISEASES OF FEMALES.

Case of Unavoidable Hemorrhage — Successful Operation of Transfusion. 284
Rupture of the Unimpregnated Uterus. 285
Medicated Pessaries. 285
Case of Imperforate Vagina at the time of Labor. 285

MISCELLANEA.

Progress of Cholera. 287
Professor Syme. 287
Revolutionary Attack upon a Prof. of Chemistry. 288
Medical School of Portugal. 288
A Statue of Liston. 288
The Wounded in Paris. 288
Re-Vaccinations in the Prussian Army. 288

☞ Communications intended for publication, and Books for Review, should be sent *free of expense*, directed to the Editor of the New-York Journal of Medicine, care of Henry G. Langley, 3 Astor House, Barclay street, New-York. Persons at a distance may direct parcels *paid* as above, under cover, to Lindsay & Blakiston, Philadelphia; or Wm. D. Ticknor & Co., Boston; or John Wiley, Paternoster Row, London. The attention of Correspondents is respectfully requested to the above, as the publisher is frequently subjected to unnecessary expense for postage and carriage.

All remittances of money and letters on the *business* of the Journal, should be addressed to the publisher, Henry G. Langley, New-York.

The advertising sheet belongs to the business department of the Journal, and all communications for it should be addressed to the publisher, under whose exclusive control it is.

TO READERS AND CORRESPONDENTS.

Communications have been received from Professor Pigné, late of Paris, and Robert Newton, M. D., Medical Staff, U. S. A. Our next will also contain articles from Drs. Shearman, Whiting, Batchelder, Grey, and Gescheidt.

☞ *Correction.*—In our editorial in the last number, on the "Ancient Monuments of the Mississippi Valley," we inadvertently stated that the authors of this great work were both members of the medical profession. This is a mistake. The latter gentleman named in that notice, only, is a member of our profession. This we are induced to state in justice to the authors of the work—a work which reflects great credit upon all concerned in its production. We hope, in our next number, to be able to give an extensive analysis of its contents, at least so much of it as relates to Medical Science.

On page 210, *line* 6 *from bottom*, *read* carbonate of ammonia, ʒj, *instead of* ℥j.

Number III. of Vol. 1st, of New Series, will be published on the 1st of November.

The following books, &c. have been received :—

Medical Chemistry, for the use of Students, and the Profession: Being a Manual of the Science, with its applications to Toxicology, Therapeutics, Hygiene, &c. By D. P. Gardner, M. D., formerly professor of Chemistry in the Philadelphia College; and of Chemistry and Natural Philosophy, in Hampden Sydney College, Virginia; Corresponding Member of the Lyceum of Natural History, New-York, etc. etc. Philadelphia: Lee & Blanchard. 1848. 12mo. pp. 396. (From the Publishers.)

Lectures on the Theory and Practice of Physic. By John Bell, M. D., Member of the American Medical Association, and of the Medical Society of the State of Pennsylvania; Fellow of the College of Physicians, Philadelphia; Member of the American Philosophical Society, and of the Georgofili Society of Florence; and By William Stokes, M. D., Lecturer at the Medical School, Park street, Dublin; Physician to Meath Hospital, etc. etc. Fourth edition, revised and enlarged. Philadelphia: Barrington & Haswell. 2 vols. 8vo. pp. 784—976. (From the Publishers.)

A Practical Treatise on the Diseases of Children. By J. Forsyth Meigs, M. D., Lecturer on the Diseases of Children, in the Philadelphia Medical Association; Fellow of the College of Physicians of Philadelphia. Philadelphia: Lindsay & Blakiston. 1848. Large 12mo. pp. 575. (From the Publishers.)

A Practical Treatise on Poisons; their Symptoms, Antidotes, and Modes of Treatment. By O. H. Costill, M. D. Philadelphia; Grigg, Elliot & Co. 1848. 16mo. pp. 160. (From the Publishers.)

An Account of some of the most important Diseases peculiar to Women. By Robert Gooch, M. D. With illustrations. Second edition. Philadelphia: Barrington & Haswell. 1848. 8vo. pp. 322. (From the Publishers.)

Lead Diseases. A Treatise from the French of L. Tanquerel Des Planches. With notes and additions, on the use of lead pipe and its substitutes. By Samuel L. Dana, M. D., LL. D.; Member of the American Academy of Arts and Sciences; Corresponding Member of Boston Society of Natural History; of the Academy of Natural Sciences at Philadelphia; of the National Institute at Washington. Lowell: Daniel Bixby & Co. 1848. pp. 443. (From the Publishers.)

Observations on Surgical Diseases of the Head and Neck. Selected from the Memoirs of the Royal Academy of Surgery of France. Translated and edited By Drewry Ottley. London: Printed for the Sydendam Society. 1848. 8vo. pp. 293.

A System of Clinical Medicine. By Robert James Graves, M. D., M. R. J. A., one of the Physicians of Meath Hospital, and County of Dublin Infirmary;

formerly Professor of the Institutes of Medicine; Honorary Corresponding Member of the Royal Society of Berlin; the Imperial Medical Society of Vienna; and of the Medico-Chirurgical Societies of Hamburg, Tubingen, Bruges, Montreal, etc. etc. With notes, and a series of Lectures. By W. W. Gerhard, M. D., Lecturer on Clinical Medicine to the University of Pennsylvania; one of the Physicians to the Pennsylvania Hospital, etc. etc. Third American edition. Philadelphia: Barrington & Haswell. 1848. 8vo. pp. 751. (From the Publishers.)

Report on Epidemic Cholera. By C. B. Coventry, M. D., Professor of Obstetrics and Medical Jurisprudence in Geneva Medical College, and Professor of Physiology and Medical Jurisprudence in the University of Buffalo. Utica, 1848. 8vo. pp. 13. (From the Author.)

The following Journals have been received in Exchange:

The Medical Examiner and Record of Medical Science, edited by Robert M. Huston, M. D., for July and August. (Monthly. Philadelphia.)

The American Journal of the Medical Sciences, edited by Isaac Hays, M. D., for July. (Quarterly. Philadelphia.)

The American Journal of Insanity, edited by the Officers of the New-York State Lunatic Asylum, for July. (Quarterly. Utica, N. Y.)

The New-Jersey Medical Reporter, and Transactions of the New-Jersey Medical Society, edited by Joseph Parrish, M. D., for July. (Quarterly. Burlington.)

The American Journal of Pharmacy, published by authority of the Philadelphia College of Pharmacy, edited by Joseph Corson, M. D., and Wm. Proctor, Jr. for July. (Quarterly. Philadelphia.)

The Charleston Medical Journal and Review, edited by P. C. Gaillard, M. D., and H. W. De Saussure, M. D., for July. (Bi-Monthly. Charleston.)

The New-Orleans Medical and Surgical Journal, devoted to Medicine and the Collateral Sciences, edited by J. Harrison, M. D., and A. Hester, M. D., for July, (Bi-Monthly. New-Orleans.)

Southern Medical and Surgical Journal, edited by Paul F. Eve, M. D., for July and August. (Monthly. Augusta.)

St. Louis Medical and Surgical Journal, edited by M. L. Linton, M. D., and Wm. M. McPheters, M. D. July and August numbers not received. (Monthly. St. Louis.)

Buffalo Medical Journal, and Monthly Review of Medical and Surgical Science, edited by Austin Flint, M. D., for July and August. (Monthly. Buffalo.)

The North-Western Medical and Surgical Journal, edited by W. B. Herrick, M. D., and J. Evans, M. D., for June. August number not received. (Bi-Monthly. Chicago and Indianapolis.)

The Missouri Medical and Surgical Journal, edited by Thos. Barlow, M. D., and A. J. Coons, M. D. July and August numbers not received. (Monthly. St. Louis.)

The Western Lancet and Hospital Reporter, edited by L. Lawson, M. D., and John P. Harrison, M. D. July and August numbers not received. (Monthly. Cincinnati.)

The Boston Medical and Surgical Journal, edited by J. C. V. Smith, M. D. July and August numbers not received. (Weekly. Boston.)

The Western Journal of Medicine and Surgery, edited by D. Drake, M. D., L. P. Yandell, M. D., and F. W. Colescott, M. D. July and Augustn umbers not received. (Monthly. Louisville.)

The Annalist. a Record of Practical Medicine in the City of New-York, edited by Wm. C. Roberts, M. D., for July and August. (Semi-Monthly. New-York.)

The New-York Dental Recorder, edited by C. C. Allen, M. D., Dentist, for May and June. (Monthly. New-York.)

The Water Cure Era, Devoted to the Explanation of the Principles, Practice, and Philosophy of Hydropathy, edited by Drs. T. P. Abertson, and A. V. Talbert. (July. New-London.)

The British-American Journal of Medicine and Physical Science, edited by Archibald Hall, M. D., L. R. C. S. E., for July and August. (Monthly. Montreal.)

The Half-Yearly Abstract of the Medical Sciences, edited by W. H. Ranking, M. D., for July, 1848. (Half-Yearly. American Edition. London copy not received.)

The Retrospect of Practical Medicine and Surgery, edited by W. Braithwaite, M. D., for July, 1848. (Half-Yearly. American Edition. New-York. London copy not received.)

Dublin Quarterly Journal of Medical Science, edited by ——. August number not yet received (Quarterly. Dublin, Ireland.)

Monthly Journal and Retrospect of Medical Science, edited by ——. June and July numbers not yet received. (Monthly. Edinburgh and London.)

London Medical Gazette, or Journal of Practical Medicine, edited by ——, for July and August. (Weekly. London.)

The British Record of Obstetric Medicine, Surgery and Diseases of Women and Children, &c. &c., edited by Charles Clay, M. D. (Not yet received.)

THE NEW-YORK
JOURNAL OF MEDICINE.

FOR SEPTEMBER, 1848.

PART FIRST.

ORIGINAL COMMUNICATIONS.

Art. I.—*Report upon an Individual of the Bushman Tribe of Hottentots, brought from the Cape of Good Hope, by* Mr. Chase, United States Consul at the Cape. By the Committee of the Lyceum of Natural History of New-York, Arthur B. Stout, Woolcott Gibbs, John A. Smith, John L. Le Conte, Theo. C. Tellkampf.

A favorable opportunity having presented itself to examine one of the tribe of Bushmen, Boschimans or Saabes, of the Hottentot race, your committee have accepted the facilities given them by Mr. Chase, formerly Consul of the United States at the Cape of Good Hope, carefully to examine the peculiarities of the individual in question.

Mr. Chase has kindly furnished the committee with the following circumstances of his early history.

532 *Broadway*, 24*th April*, 1848.

Dr. Arthur B. Stout :

Dear Sir,—I beg leave to state for the information of the scientific society, that the Bushman which I have brought from South Africa, came into my possession between four and five years ago, from the hands of a trader, who (according to his own account,) picked him up in a dying state, while passing through the Bushman country. The Caffres had come upon the Bushmen, during the time the trader was on his return from an expedition and had murdered a great many of these poor creatures, many dead bodies being constantly in view. He found that life still remained in the boy, Henry, picked him up, placed him in his wagon, nursed him until he was quite recovered and brought him to Cape Town. On the eve of his starting again for the interior, the trader came and requested me to take charge of him.

I have succeeded in learning him to speak the English language, but with great trouble. I have found it difficult to command his attention. I have, however, taught him by taking articles which he could see, and making him repeat the names after me until he could recollect them, so that he now pronounces pretty correctly.

When clothes were first put on the boy, he seemed to be in chains, shaking himself, and the moment he could get out of the presence of others, would often strip off his clothes and leave them on the ground.

He is somewhat stubborn and disobedient, but I have thus far succeeded in bringing him to this state without once inflicting the smallest chastisement. Enclosed you have a pretty correct description of the tribe from the "Boston Herald."

I am, sir, your obedient servant,

Isaac Chase.

Before offering remarks, we give at once the following measures and description.

MEASUREMENT.

Facial angle,	90°	nearly.
Circumference of head,	$20\frac{1}{2}$	inches.
Height of the individual,	4	feet.
Antero-posterior diameter of head,	$7\frac{1}{4}$	inches.
Occipito-frontal do. do.	$6\frac{5}{8}$	"
Parietal diameter,	$5\frac{3}{8}$	"
Mento-occipital,	$8\frac{3}{8}$	"
Temporal diameter,	$3\frac{15}{16}$	"
Height of forehead to noge of the hair,	$1\frac{7}{8}$	"
Mento-frontal line, or length of face to the noge of the hair,	$5\frac{1}{2}$	"
Across the cheek bones,	$4\frac{1}{4}$	"
Breadth between the eyes,	$1\frac{3}{8}$	"

DESCRIPTION.

Head slightly flattened on the top, large and globular. Parietal bones prominent, cheek bones high. Eyes very nearly or exactly in the same line. Nose very flat, curving inward in the middle, sloping obliquely at the nostrils; nostrils small and broad. Lips not very thick, but full. Teeth good, vertical. Ears very prominent, everted, thick margins, small. Hands and feet very small and well formed. Chest narrow and frame slight but symmetrical. Very active and quite muscular. Color light brown, rather lighter on the face than on the trunk.

Intellect like that of a child of 6 or 7 years.

An idea of the general configuration of the face, and also of the color of the person, may be obtained from the annexed drawing.

The African type is strongly developed. He has the black curly hair, dark eyes, high cheek-bones, and flat nose of his race. But the lips are not remarkably prominent, and would appear even less so if the nose were more elevated. The expression of the face is pleasing, and its form regular. The forehead is, comparatively to the face, high, and is not receding. Certainly, in these respects he differs from the character attributed to the Bushmen, whose physiognomy is represented as ugly, repulsive and disgusting in the highest degree.—The eyebrows are placed rather obliquely, inwards and downwards, towards the median line; but the eyes are not oblique, they are horizontal; and in this respect again he differs from the description of the Bushmen. The nasal septum between the eyes is extremely broad, and much depressed. The size of the face comparatively to that of the cranium is very small; so that we look in vain for the extremely animal expression and development of the sensual aspect assigned to this oppressed and degraded tribe. On the contrary, the intellectual so far takes precedence of the animal configuration, that if we should rely upon the written descriptions of Bushmen, we should be induced to believe that the present is not of that tribe.

Again, it has been stated that the feet of this tribe are so remarkably formed that an inspection of a foot-track suffices to identify a Bushman from all the neighbouring tribes, and serves to enable the Caffres, his enemy, to pursue and overtake him. In this view we carefully examined the feet; we found them not only regular but very handsomely formed. So that if the present specimen is to be taken as the type, the peculiarity must be attributable rather to the symmetry than to any deformity of the inferior extremity.

Neither has any peculiarity been observed in the conformation of the pelvic region.

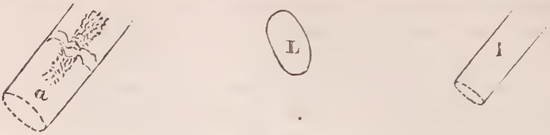
The hair presents marked differences from that of the Caucassian, or the Negro. It is flattened, and not cylindrical, concave on one side, convex on the other. It has, however, a fibrous, cortical substance, and a granular medulla. It is compactly curled, is very fine, and is scattered in little tufts on the head, with intervals in which the skin is distinctly seen. The termination of each tuft is in a compact twist, which resembles the whorl of a gimblet.—These little tufts when drawn out contain hairs from four to six inches in length. But the hair does not grow down the back of the neck, as is stated of the Bushmen tribe.

Under the microscope the hairs often appear split in three parts at the end, are distinctly fibrous, and when broken or twisted split up, and show little fibres like splinters. The hair bulb is terminated by little fibrillæ, and is rather more cylindrical than in the hair of the whites.

Dr. Tellkampf has made the accompanying measurements of the comparative dimensions of Caucassian, Bushman, and Negro hair, together with outlines. Measurements can, however, whether direct or comparative, have only a passing interest; for the hair in Bushmen as in others must be subject to great variations.

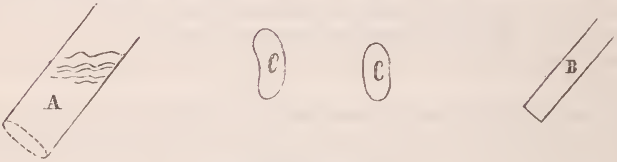
The flattened concavo-convex form is, however, peculiar. The diathesis of this individual of the tribe is manifestly scrofulous, as may be concluded from the general delicacy of his conformation; his small stature, the commencing unsoundness of his teeth, the striated, semiopaque, and incurvated condition of his nails, the eruption of porrigo furfurans which affects his scalp, and the disposition he

HAIR OF A CAUCASSIAN.



Breadth. Thickness. Short Diameter.

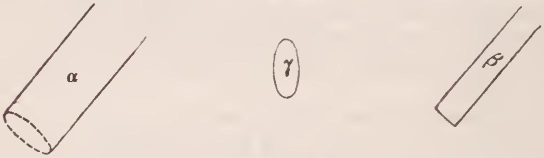
HAIR OF A BUSHMAN.



Breadth. Thickness. Short Diameter.

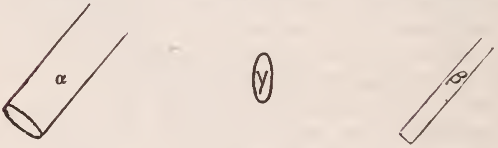
HAIR OF A NEGRO.

First Specimen.



Breadth. Thickness. Short Diameter.

Second Specimen.



Breadth. Thickness. Short Diameter.

RELATION OF BREADTH TO THICKNESS.

Caucassian,	α	:	l	::	5	:	$3\frac{1}{2}$	=	10	:	7
Bushman,	A	:	B	::	5	:	2	=	10	:	4
Negro, 1st sp.	α	:	β	::	5	:	$2\frac{1}{2}$	=	10	:	5
" 2d sp.	α	:	β	::	$4\frac{1}{2}$	:	$1\frac{1}{2}$	=	9	:	3

	CAUCASIAN.	BUSHMAN. (In Paris Lines.)	NEGRO.
Breadth,	α 0.050	A 0.050 to 0.060 to 0.045	α 0.050 or 0.035
Thickness,	l 0.035	B 0.020 " 0.027 " 0.018	β 0.025 " 0.015

Granular Substance (marrow) α $\frac{1}{4}$ to $\frac{1}{3}$ of the whole breadth.
" " " α generally wanting, $\frac{1}{12}$, $\frac{1}{8}$ to $\frac{1}{5}$ where it exists.

One side of those hairs which I have examined was convex, the other either concave, straight or less convex.—A. B.

shows to be subjected to catarrhal affections. Although sensible to the severity of our climate, which constantly compels him to put on thick clothing, he must have experienced some of the rigors of climate before he left his own country. And as he has always been well clothed, nourished, and protected, perhaps here more so than at home, there is no reason to suppose that the affection has been developed since he was transported from his native soil. On the contrary, the fact that the Bushmen are seldom known to live over fifty years, are a squalid red, and subsist in the most miserable manner it is fair to infer that scrofula is a common and hereditary disease of the tribe.

We have thus far spoken of the physical development and aspect of our Bushman. It has been a subject of interest to the Committee to observe his intellectual condition.

We stated, in brief, that his intellect was like that of a child of six or seven years. And, in truth, his mind is too immature to be capable of any serious employment. And should we compare him with children of cultivated and civilized people, whose education in fact begins from their earliest infancy, we might find him deficient. But a more just comparison with the children of savage tribes and those tribes African ones, wandering, hunted like wild animals, and struggling against the unpropitious circumstances of a sterile country, will place the intelligence of our little Hottentot in a far more favorable light, and again distinguish him from the description which stigmatizes the Bushmen as the lowest in the scale of mental capacity. He is decidedly intelligent, quick in his perceptions, and possessed of a full share of vivacity. His answers are appropriate, and often pertinent, and his judgment proportionately to the opportunities he has enjoyed to cultivate his understanding, is as strong as could be expected.

During the time he has been protected by Mr. Chase, he has learned to speak English well, and has made as satisfactory progress in learning the different branches of primary education as could be anticipated from a desultory course of instruction. He learns the various amusements of children with facility and eagerness, and shows ingenuity in contriving articles of play and diversion, as kites, &c. Having shown him a large building in course of construction, he recognized it as a church, and gave intelligent reasons why it was a church and not a dwelling-house; that it had pillars, windows with arches, and was very large. Some barrels being pointed out to him, he designated them as barrels of pitch, as they were. From a handful of money, he could readily distinguish the different coins. In a word, he gave evidence that he possessed the faculties of perception, discrimination and observation in a high degree, and kept them in constant exercise. Better manifestations of intelligence were however elicited in his interviews with the artist to whom we are indebted for the accompanying sketch. As he soon wearied of sitting quietly, various promises, entreaties, bribes, and even threats were resorted to, but quickly failed to appease his impatience. The flattery of making him a handsome picture was quite lost upon him. But when pictures were shown him, he had so many questions to ask about them, that he entirely forgot the artist. At a second sitting, he listened eagerly to stories and fables. The facts of the history of William Tell having been related to him, he showed that he had fully comprehended it. The sharp-shooting particularly attracted him, and no one could have expressed more gratification when Tell's joy at receiving his son when he ran to him with the pierced apple was described. Being asked which he would rather have been, as William Tell or Gessler, he replied, "William Tell, for he was braver and better, and did n't get killed." To the fable of the Fox and Crow, he listened with intense interest, and anticipated its conclusion by crying out, while laughing, "and when he opened his mouth to sing, he dropped his cheese, and the fox stole it." One more trait of intelligence deserves notice. He was told to retaliate upon the artist by making a sketch of *him*—and in the rough diagram he scribbled in a moment, the idea of the artist was distinctly visible.

These details, apparently insignificant, are nevertheless the scintillations of an active mind, and are some of the tests which have been used to inquire if he were susceptible of improvement. That his mind is very youthful is certainly true, but let us not forget whatever may be the actual age of the individual, in all that regards the subjects upon which his mind has been interrogated, it has had but five or six years of cultivation. The question of age is here naturally asked; we are informed that he is about 18 or 19 years old. Some doubt, however, may be indulged upon this point. He has been in the possession of Mr. Chase but five or six years, anteriorly to which all is obscure and vague. We may therefore be permitted to reason upon general facts. Upon his face and lip there is no sign of beard, and no hair upon the pubis. The last molar teeth are not yet above the gums; his hands and feet resemble those of a person less than twelve years old, both as regards size and delicacy of appearance; his habits, games, propensities, and tastes, are all those of youth. Females appear to possess no more attraction for him than males, and neither when questioned, nor when observed without his notice, has any thing but the indifference of a person not yet arrived at puberty been discovered. His virile organs appear as undeveloped as those of a child of 6 or 8 years. In this respect no deficiency is laid to the account of Bushmen, and if the present specimen were 18 or 19 years old, why should he not display the maturity of his age by some appreciable signs, as well as the propensities of his tribe; or at any rate a virility in some degree proportionate to his physical and mental vivacity.

According to Martin, the "Prognathic race" of the human species, a term derived from Greek words expressive of the great prominence of the maxillæ or jaw-bones; and to which race the present individual belongs, is composed of four classes, the Negros, the Hottentots, the Papous, and the Alfourous.

The Hottentots consist of the Namaquois, Coras, Gonaquois and Saabes, or Bushmen. This race is thus designated: Jaws prominent and large, incisor teeth *oblique*, forehead narrow, head compressed on the sides, cheek-bones high, lips thick, nose flattened, nostrils widely opened, hair woolly and matted, sometimes frizzled, stiff and long, beard sparse and stiff, color deep black or tawny and yellowish.

The subject of this paper differs strongly from many of these characteristics. His teeth are vertical, his jaws are not particularly prominent, eyes are not oblique, his forehead is neither narrow or receding, nor very low. In other respects, however, he agrees with the description, but yet appears of a much more elevated character than the Saabes, who are placed at the foot of humanity.

In conclusion, your committee congratulates the Lyceum upon the opportunity the Lyceum has enjoyed to study an individual possessing such interesting features, but is of opinion that the present specimen does not suffice to draw general conclusions in regard to the Bushman tribe, as well on account of his youth, and his perhaps doubtful lineage, as the differences he presents from the accepted descriptions of this obscure tribe, but considers him a valuable type for comparison when future opportunities may occur.

ARTHUR B. STOUT, M. D.
JOHN L. LE CONTE, M. D.
THEO. C. TELLKAMPF, M. D.

ART. II.—*On the Symptoms, Phenomena, and Exciting Causes of Inflammation.* By J. P. BATCHELDER, M. D., [Read before the New-York Academy of Medicine, September 1st, 1847.]

MR. PRESIDENT,—I propose this evening to make a few remarks on the symptoms, phenomena, and exciting causes of inflammation; a disease upon which so much has been written, and which is so well understood, by the Fellows of this Academy, that I am not without apprehension lest I should fail to render an equivalent for the attention which will be vouchsafed by the kindness and courtesy of my audience.

Having, however, seen no pathology of this disease, from which the indications of cure, and the methodus medendi seemed to flow as natural, regular and legitimate deductions, the object of this paper is to propose, for consideration, a theory which may remedy that defect. Whether the effort will be crowned with success, or the views presented meet with any favor, other than a candid hearing in this learned body, is to me quite problematical.

THE SYMPTOMS

of inflammation are redness, swelling, pain and heat. "Rubor et tumor, cum calore et dolore" in the pithy language of Celsus.

Although the assemblage is sufficiently characteristic of the disease, yet no one of the group can be considered pathognomonic.

Increased heat, as a positive quality, is only a contingency, or an occasional concomitant, and therefore we shall regard it simply as a mere sensation, and trace out the laws by which it is governed in that relation.

1. Redness arises from an increased determination and admission of blood into the vessels of an inflamed part, and particularly such as in a state of health circulate colorless fluids. This color is not always very apparent in the early part of the disease; but becomes more and more conspicuous during its progress. We look upon it as the most important symptom;—indeed, we deem it essential; for upon it, or rather its cause, all the other phenomena depend. Although sometimes present without inflammation, yet it is believed that inflammation cannot exist when it is absent. By the degree of redness we may judge with considerable accuracy of the stage, rapidity and violence of the disease; the color of a part being a pretty sure index to its circulation.

TUMEFACTION, OR SWELLING.

2. To a certain degree swelling occurs in all inflammations, internal as well as external, although not so apparent in the former as in the latter. Like increased redness, it is generally proportionate to the intensity of the disease, but is, however, much modified in that respect by the greater or less density of the part affected.

An over-distention of the capillary vessels is the first link in the chain of causation. As the capillaries like the hollow viscera, have no power of distending themselves, the manner in which they become distended, or over-distended in inflammation, may be more properly considered when we come to discuss the modus operandi of the causes of that affection; we shall therefore assume for the present that by the influence of those causes, the capillaries of a part are induced to forego their resistance, and that consequently, in accordance with the principle in hydraulics, that fluids move in the direction in which they meet with least resistance, more blood will flow into them, and continue to do so until they become distended, and, in fact, over-distended, in proportion to the diminution of their resistance and the intensity of the *vis a tergo*. When this over-distended state has continued for some time, the pores which are analogous to the sphinctered outlets of the larger organs, like them, under similar circumstances, relax and allow the fluid contents to pass; hence the effusion of serum, albumen and coagulable lymph, which is the second link in the chain, and constitutes the main cause of the tumefaction.

Now the right performance of the function of a capillary or hollow viscus, having an outlet, depends as much upon its mouth or pore as upon the vessel or viscus itself: in other words, to perform the function properly, there must be a just equilibrium between the force with which the vessel or viscus contracts and that with which the pore or sphincter resists. When the distention is only moderate or normal, the vessel acts gently, the pore relaxes, and effusion or transudation ensues. For example :—when the cutaneous capillaries are only normally distended, we have neither more nor less than insensible perspiration; and this degree of distention we designate by the figure 3; if the distention be increased to 4, there will be sensible perspiration; if to 5, copious sweating; if to 6, the skin will be dry and hot; the sphincters or pores holding tight in consequence of the over-distended state and violent contractile efforts of the cutaneous capillaries, in which respect the analogy between them and their pores and an over-distended bladder and its sphincter holds.* Be it remembered, that this distended state of the capillaries of a part constitutes one of the items, a small one it is true, which go to make up the tumefaction; but the effusion of serum, albumen, fibrine, and sometimes blood, are the principal causes.

How does this effusion take place, and by what law is it governed or regulated? We come to the principle. If from any cause the capillaries be suddenly or violently distended, or over-distended, and consequently prompted to act violently, or inordinately, as in inflammation, the pores, like the sphincters of the bladder or anus similarly circumstanced, act or resist no less violently and inordinately, and consequently suffer no fluid to escape; and this we conceive to be the precise state of the vessels and pores in the incipient or early stages of that disease, and is analogous to that of the vessels on the surface during the hot stage of an intermittent, in which the skin is dry.

At this period, there is no other swelling than that occasioned by the distended state of the vessels of the part. There is no effusion of serum; none of fibrine. There is mere congestion. How is the effusion produced? The vessels, over-distended—the pores, constricted and resistant. How then, I repeat, is the effusion produced? The principle is this, that rest shall succeed to action. This law results from necessity and is consequently universal, reaching and controlling all vital movements; hence, vascular contraction is followed by the spontaneous relaxation to which we have alluded, and which generally, is in proportion to the previous contraction. Therefore, in obedience to this law, the pore or sphincter, (see the preceding note,) as the case may be, which has been for some time resisting powerfully and completely, the inordinate action of the vessel or viscus, and of course preventing the transmission of the fluids by which the latter (the vessel or viscus,) were distended, now in its turn foregoes its resistance, relaxes and allows the effusion of serum or fibrine to take place into the inflamed part, or perspirable matter over the whole surface as in the sweating stage of an intermittent. In both cases, the over-distended vessels are thus relieved. The final end of this effusion is to empty the vessels; in other words, to cure the disease. This is the method of nature and also of art; a fact of which the practitioner should never lose sight.

---

* In an over-distended state of the bladder, from long-continued retention, its sphincter often relaxes, and incontinence ensues; a circumstance which not unfrequently misleads the unwary practitioner, and induces him to forego the introduction of the catheter, the only sure remedy for the retention which still continues, and may cause the bladder to ulcerate, and the unfortunate patient to lose his life.

If this want of equilibrium between the vessels and their pores continue but for a short time and the effusion be but slight, resolution is said to have taken place, which is one of the terminations of inflammation mentioned by systematic writers; but with all due deference, we are disposed to consider the effusion by which the vessels are emptied and relieved as the only legitimate termination of that disease; if indeed we except gangrene.* If the state of distention continue several days, the effusion may be considerable and of a mixed character; as serum, albumen, coagulable lymph or even blood. It constitutes the principal or main cause of the swelling, the second symptom. We are, however, ready to admit that want of absorption and the generation of new vessels, tend in some degree to augment the tumefaction, and here it is proper to remark that the formation of new vessels is often exceedingly rapid, which with the secretion of pus, has been reckoned among the causes of swelling, and therefore, we shall proceed briefly to consider them.

Let us inquire, *in limine*, why are these new vessels formed? and why is pus secreted? The effused fluids, if too great in quantity to be absorbed, will remain an incumbrance greatly interfering with, or wholly suspending the function of the organ or part; therefore, to get rid of them, the suppurative process is instituted by nature in the simplest manner possible; to wit, by the formation of new vessels and consequent organization of the effused lymph. The secretion of pus then is the final end of the formation of new vessels. How are they formed? On this point we shall hazard a conjecture, which, like the theory promulgated this evening, was framed many years ago; that a globule of blood escapes from a vessel, probably the same which furnished the lymph, through which it (the globule) makes its way, and thus forms a channel along which other globules following close and in rapid succession, pass and continue to move until the track becomes a vessel;—similarly-occurring results take place on every side;—globules after globules escaping from other vessels, and passing in all directions, till channel runs into channel, and globule joins globule, when they will move in that direction in which they are most forcibly impelled by the *vis a tergo* which continues to urge them along, until the channels are converted into living vessels, temporary or permanent, according to subsequent circumstances. If the newly-formed vessels, or the old ones, which according to some have become elongated and made their way into the effused lymph, unite so as to carry on the circulation in that substance, thus vascularized and organized, the inflammation is said to have terminated by adhesion, which according to our doctrine is in-correct; but when the quantity of coagulable lymph, or of other fluids, is too large to admit of this kind of inosculation, the adhesive process fails altogether, and the suppurative is instituted, and pus secreted for the purpose already stated. But how is pus, which is said to be "altered blood," formed? How is the blood "altered?" Where are we to find this modifying—this altering power? What are the agents by which the suppurative process is commenced, carried on, and consummated? It is believed that the capillaries wherever situated, whether in the areolar tissue, the serous or mucous membranes, or on the surface of the body, or a wound, will secrete pus whenever they become invested with a coating of coagulable lymph, and that this is the main, if not the only contingency required for altering the blood, and changing it into pus. Upon this principle, the primitive vessels, if elongated into the adventitious lymph, will secrete pus. But the business, so far as an abscess is concerned, is probably done chiefly by the newly formed vessels, which are little other than imperfectly animalized tubes, that can exert no other than a mere altering influence upon the blood, which converts it into pus.

---

* When inflammation terminates in gangrene, the over-distended capillaries "resist unto the death." On the contrary, we may have gangrene from an over-constricted state of the capillaries, as in the gangrene of old people; also in that from interrupted circulation, &c. &c. This constitutes the dry gangrene of authors and is not preceded by inflammation. In the first instance the vessels resist until they lose their vitality. In the second they contract until they die. The resistance and the contraction are both painful, and are followed by the same result.

The first function then, of the newly-formed, or the elongated portions of the primitive vessels, when prevented from inosculating by the quantity of lymph, is the secretion of pus.

According to the theory advanced, the disease terminated with the effusion which emptied the vessels; therefore, suppuration is to be considered neither a termination of inflammation, nor a cause of tumefaction, as a symptom.

PAIN.

3. The third symptom of inflammation is pain; the cause of which does not appear to have been explained in a very satisfactory manner. It was supposed to be owing to the swelling which put the nervous fibrillæ in the inflamed part upon the stretch; but opposed to this is the fact, that the pain and sensibility are often not at all commensurate with the degree of tumefaction: for we frequently find a part under inflammatory circulation exceedingly sensitive when there is little or no swelling;—and also, a part very much swollen, as in dropsy, without either pain or increased sensibility; the latter is, indeed, sometimes diminished, although the nervous fibrillæ are greatly stretched. Pain, in all cases, without a single exception as we believe, arises from one of two causes: an over-constricted, or an over distended state of the vessels. The latter is their condition in inflammation; and the pain which results from it precedes the tumefaction from effusion. On account of the importance of pain as a symptom of inflammation, and the practical inferences to be drawn from it, we shall examine whatever relates to it with considerable care. In accounting for this symptom, the influence which red or arterial blood (we use the term synonymously) has in exalting the sensibility of a part, seems to have been disregarded, or entirely overlooked; but it appears to the speaker of sufficient moment to be entitled to consideration, and, therefore, he risks the observation

that this connection between the sensibility of a part and the quantity of arterial blood circulating in it, is believed to be so strict and invariable that no portion of the body through which red blood circulates, is wholly insensible; and that no part destitute of red blood is endowed with sensibility; and furthermore, that this holds as well in the morbid as in the healthy condition of parts—a consideration that greatly enhances the value of the doctrine. It may therefore be laid down as an axiom in physiology and pathology, that whatever diminishes the influx of red blood into a part, or forces it out, produces a corresponding diminution of its susceptibility of impression. Fear and cold, by causing the contraction of the capillaries on the surface, and consequently forcing the blood out of them, diminish its sensibility; hence the torpor and insusceptibility of impression which so uniformly accompany their influence. Joy and warmth, by relaxing the vessels, and the consequent admission of red blood, increase the susceptibility of impression. Cordials taken into the stomach produce the same effect. If, in a doubtful case, we wish to determine the hardness of the pulse, or the existence of matter in an abscess, we almost instinctively rub the fingers, or hold them near a fire in order to exalt their sensibility of touch by soliciting to them a greater quantity of blood. It is needless to multiply proofs that the sensibility of a part is very closely connected with, if not absolutely dependent upon the quantum of blood circulating in it, for every one must be acquainted with the fact, that the nails, hair, bones, cartilages, fibrous membranes, &c., which, in their normal state admit no red blood, are devoid of sensibility.

When the capillaries of a part are distended beyond their healthy condition, resistance is excited, and an effort to expel the distending fluid ensues, both of which circumstances are productive of pain, which, upon the principle laid down, is greatly aggravated by the presence of arterial blood, which has exalted the sensibility. Again, when the capillaries are contracted much below their normal or healthy standard, this over-contraction, like the over-distention just mentioned, is also the cause of pain. In fact, these opposite states, when extreme, produce sensations so nearly alike that it is quite difficult, especially when an internal organ is involved, to diagnoze between them without adverting to collateral circumstances.*

This third symptom, pain, is not only a matter of deep concernment to the patient, but of much consequence to the practitioner, when rightly and properly understood; for it greatly assists him in determining what particular tissue or structure is affected. In health, every function is performed without exciting pain, uneasiness, or even consciousness of action; when, therefore, either is experienced, the sensation resulting from perception of change indicates disorder

---

[a] The most serious consequences have often ensued when these affections have been wrongly diagnozed, which might have been readily prevented had the question, whether the pain and other symptoms arose from an over-contracted or an over-distended state of the vessels of the part, been fairly put, duly considered, and fully answered. This matter, though important, and intimately connected with our subject, must be passed over with this brief allusion, which will be comprehended by every gentleman of experience.

or disease. Now, similar changes can take place in similar structures only;—pain or feeling being the perception of change, it likewise follows that similar feelings can be experienced in similar structures only; and dissimilar feelings in dissimilar structures only;—different sensations always indicating different organisms. Now, the mechanism of every structure is peculiar to itself; consequently each tissue must have its own peculiar mode of acting, and of course its own kind of feeling. The final end of this arrangement is probably conservative. for we observe that the feeling of each part is that which is elicited by causes adapted to derange its function, or disorganize its structure, the uneasy sensation prompting us to procure their removal.

The fact that a great number of feelings, which have been supposed to arise from the peculiar properties of the external cause or agent, may be produced without any external agent or cause whatever, goes to prove most conclusively, that the immediate object of perception is the vital change in the organ itself rather than the physical action of the cause applied; therefore, it is quite immaterial to the surgeon, or practitioner of medicine, so far as the location of the change is concerned, whether an external or an internal cause be the agent by which it is effected. As we have not time to go into an argument to prove that feelings are necessarily modified by structure, we shall only allude to the fact that the same sensation may be produced by many different physical causes, which can be explained in no other way than by supposing that the action which results from their agency is so modified by the structure of the part that it (the action) is and must be the same in each particular instance, hence the same sensation is produced. Nausea, for example, is excited by emetic drugs of quite different qualities; and a great variety of other physical agents, and very often in the absence of all such causes; by the mere action of the stomach, as in inflammation of that organ, or even a blow on the head, by sailing, whirling, or by mental emotion, yet the sensation is the same, however variant the cause; and we know where to locate the derangement, because the stomach, from its peculiarity of structure, is the only organ in the body calculated to experience that sensation. Besides the mechanism of an organ as a whole, by which it is suited to perform its destined functions, there are, it should be recollected, various textures which enter into its composition, and which, if they could be acted on singly, without any other being affected, would always give rise to the same sensation For instance, if there be inflammation in any part of the alimentary canal, and the patient complain of a sense of burning, we locate the disease mainly in the mucous membrane;—of a griping pain which goes and comes, we infer that the muscular coat which contracts painfully, and relaxes spontaneously, is involved;—of sharp, shooting or lancinating pains, we are quite sure the disease has extended to the peritoneal covering of the intestine, because those are the sensations peculiar to serous membranes. These several tissues are so intimately connected, that one can seldom be much affected without causing disorder in the others, which may be so much more intense in one than in the rest as to obscure the sensations peculiar to them. Again, take ophthalmia as another example:—if the patient complain of a feeling as if a particle of sand were in the eye, we know that the seat of the complaint is in the conjunctiva;—of spasmodic pains, we infer that the muscular tissues about the organ are in trouble;—of a sense of constriction or of resistance, it is a sign that the sclerotic is involved;—if there be great sensibility to light, we suppose that the retina, and perhaps the choroid also, are in the same predicament. If the phlogosis be in the skin, we shall hear of itching,[*] smarting, increased heat, or burning;—if in the muscles—of the sense of fatigue, of cramps or spasms, which indicate inordinate or convulsive action; symptoms which are so common in fractures, and not unfrequent in inflammatory rheumatism;—if in the ligaments—of the sense of contortion or distortion;—if in the stomach—of burning pain and nausea;—if in the bowels—of griping, &c.;—if in the rectum—of tenesmus;—if in a bone—of ache, the only sensation peculiar to the osseous structures; if that ache resemble the toothache, we judge that the medulla or its membrane is implicated;—if accompanied with a tensive feel—that the periosteum is complicated;—if with a sense of weariness or lassitude—that the difficulty has extended to the muscles. If the disease affect the fibrous membranes, which are inelastic, there will be the sense of constriction or of tightness; for instance, when the dura mater is affected, the patient will tell you, if particularly asked in relation to this point, that the feeling is that of constriction within the scull and about the brains, as if they were tied up in something;—or, when the pericranium is affected, that the sensation is as if a handkerchief were bound tightly about the head;[†]—or the pia-mater or arachnoid—that the pain is lancinating, shooting;[‡]—streaming, electric-like pains belong to the nerves of animal life, a fact so notorious, that no practitioner of the present day would venture to locate the pain of tic-doloreux in any other part than in a nerve.

The final end of this variety of sensation appears to be, as suggested, the welfare and protection of the organ or structure in which the feeling originated; otherwise, what would prevent us from carrying exercise to an excess which would destroy the muscles, if the sense of fatigue, which is peculiar to them, did not remind us of the propriety and necessity of suspending our efforts? Or what would save us from starvation if the physical and physiological changes in the state of the stomach did not excite the sensation of hunger? How should we know that a joint had been sprained or dislocated if the ligaments did not experience the sense of distortion, which is peculiar to them.

---

[*] This sensation (itching) is never experienced except when the cuticle is concerned, hence it is always a sign that a wound or ulcer is healing. When the patient complains that the sore itches, the intelligent surgeon knows that cuticle is beginning to form on its margin.

[†] The sensations ascribed to the above-mentioned membranes often arise from directly opposite conditions of their capillaries. In sick headache, and the cold stage of an intermittent, those vessels are constricted; in the hot stage, and in inflammation, they are over-distended.

[‡] Although the pia-mater and arachnoid are not fibrous membranes, yet I chose to mention them in this connection, on account of their being so generally involved in the same category.

INCREASED HEAT.

4. The fourth symptom, increased heat, is by no means essential, or even concomitant. Although in external inflammations, the temperature, as measured by the thermometer, almost always exceeds that of the surrounding parts, it is now very generally conceded that it seldom, if ever, transcends that of the blood in the heart, and is never commensurate with that indicated by the feelings of the patient. When secreting surfaces are inflamed, there may be the sensation of increased heat, with no actual increase of temperature, unless the disease is so severe as to stop secretion. Regardless, then, of temperature, we shall consider this symptom as a mere sensation.

Now the sensations of heat and cold appear to be almost entirely confined to the external surface of the body, because that alone is subjected to changes of temperature which might be detrimental. If those sensations be felt at all in deeper-seated parts, it is with vagueness and indistinctness; for in them they would be superfluous; because the object, let it be remembered, is not the caloric entering or leaving the body; but the perception of physical change in the part, hence the application or abstraction of caloric, the appropriate physical cause of those sensations is not at all necessary to their production; they may be produced by any cause whatever which occasions a distention or shrinking of the capillaries of the skin, the part most liable to be affected by the excess or defect of caloric, and therefore designed to experience the sensations of heat and cold. From these premises, the conclusion is drawn that this fourth symptom of inflammation is seldom present unless the skin or mucous membrane in its immediate vicinity is involved, and that it always indicates a distended or over-distended state of the capillaries of the part, and gives intimation that changes are going on in the tegumentary structures which interfere with their functions, or threaten their integrity.

OF THE EXCITING CAUSES.

Inflammation is produced by external agents acting mechanically, chemically, or physically upon any part of the body; or by causes affecting the whole system; or it may arise spontaneously—that is, without any apparent cause. We shall endeavor to trace out the connection between the causes and the phenomena; in other words, to explain the manner in which the former operate in the production of the latter, and the principles upon which their operation depends, and also to show, if we can, that the facts and the theory harmonize. In the explanation of the symptoms it was argued that the redness proceeded from the admission of red blood into vessels which previously circulated colorless fluids only; that the tumefaction arose in part from distention of vessels; but mainly from the effusion of serum, albumen, fibrine and occasionally of blood; that the pain, modified by the structure of the part, and heightened by the influence of arterial blood, resulted from the distention and over-distention, and consequent resistance of the capillaries; that the sensation of heat which was present only when some portion of the skin or internal tegument was involved, was occasioned by an increased determination of blood, to one, or the other of those tissues by which their capillaries were over-destended, the state common to all vessels, subjected to the disease.

1. How in accordance with the doctrine promulgated is this distention or over-distention of the capillaries, the *fons et origo*, the *sine qua non* of all the phenomena of the disease produced by causes acting mechanically, chemically or physically? The blood, incompressible as water, moves through the arteries by an impulse from the heart, and makes an impression at the same instant like a solid upon the capillaries in every organ, that is somewhat in proportion to its own momentum and their resistance, which (resistance) in health is supposed to be equable throughout the system, therefore, a due equilibrium between the impulse and the resistance is maintained; but if a cause be applied which takes off, or diminishes the resitance of the capillaries in any part, the blood, like other fluids, moving in the direction in which it meets with least resistance flows in and distends those vessels, which forego their resistance and consequently cease to oppose its admission even if the action of the heart be not increased; but if it be, the impetus will be necessarily augmented; and the distention in the same proportion greater and more rapid. In what way do causes of this class act so as to take off the resistance of the capillaries in any part; or induce them to lessen their resistance and suffer themselves to be distended, or over-distended? The fluids contained in the capillaries, constitute the natural stimulus, which prompts them to action or resistance.* When the vessels are healthy and their contents natural in quantity and quality, action and reaction, are duly balanced and every function normally performed. Now, then, it is an axiom in medicine, which has obtained since the days of Hippocrates, with whom it probably originated, and is acted upon by every practitioner in his daily walks, that the stronger effaces the weaker impression. If, therefore, an impression be made mechanically, chemically or physically upon a part which is stronger than that made by the fluids on the inner surfaces of their containing vessels, the latter will, in accordance with this axiom, which is in fact a law of system, cease their resistance, and yielding, suffer themselves to be distended, over-distended, and stretched, until they are excited to resist and that painfully: and as most of the exciting causes of inflammation belong to this class, and are of a painful character, their modus operandi is accounted for in that way.† We repeat, the impressions made by all or nearly all the

---

* Upon this principle, rests the whole doctrine of counter-irritation. If the external irritant make an impression, or excite an action, stronger than that going on within the diseased part, relief may be expected to follow. If otherwise, the symptoms, especially the pain, will be aggravated; the rules to be observed in order to secure the desirable result, cannot be considered in this place.

† If the cause or agent be of an opposite character and make a pleasant or an agreeable impression, provided it be stronger than that made by the fluids within the vessels, the result will be the same.

causes of inflammation are painful and also external to the vessels of the part on which they act; therefore, upon the principle laid down, they induce those vessels to relax and suffer themselves to be distended. If the cause be sufficiently powerful and the relaxation sufficiently extensive to bring the vessels of the heart into an analogous sympathetic relaxation; or in other words, to induce the capillaries of that organ to do what has been done by those of the part to which the cause has been applied, i. e. relax and admit more blood into its texture by which it, as a whole, is stimulated to increased action, the pulse will become stronger, more frequent, full and perhaps hard, and the blood be sent with greater force to all parts of the body; but finding less resistance in that, to which the exciting cause has been applied, much more will be forced into it, and its vessels in the same ratio over-distended and stretched, and the inflammation more perfectly developed and aggravated. If the vessels of the heart do not sympathetically relax and that viscus do not, in consequence, act with increased energy, there may be congestion only: Hence the same cause may produce congestion in one case and active inflammation in another. Upon this principle we explain the fact that genuine inflammation so often succeeds to simple congestion.

2. Causes affecting the whole body.

We have stated that the capillaries receive at the same instant, over the whole body, the impression of the blood sent by the heart, and that they, being the antagonists of that organ, exert simultaneously in every part an equable resistance to that impression, and that in this way the uniform distribution of the circulating fluids is maintained. How then is this equilibrium disturbed by causes affecting the whole system so as to induce inflammation? Cold and malaria belong to this class and excite a general contraction of the capillaries throughout the entire body, which is followed by a spontaneous relaxation commensurate in extent and degree with the previous contraction; if under such circumstances any organ or part from predisposition, hereditary taint, disease, injury, age or sex, be weaker than the rest of the system, its vessels, having less power of resistance, will yield and be over-distended, an effect which will be greatly enhanced by the increased energy with which the heart will act in consequence of its own capillaries having simultaneously with those of the other organs relaxed and of course admitted more arterial blood into its very textures as well as into its cavities. This class of causes sometimes act upon another principle. If the cause, extensive and powerful, be applied to the surface, the vessels of some internal organ in obedience to the law that the stronger impression effaces the weaker, may relax and become over-distended and inflammation follow, although it may not supervene until several days after the application of the cause which has disturbed the harmony of the circulatory system. Every gentleman's experience will suggest instances in exemplification of this principle.

3. Inflammation may arise spontaneously; or without any apparent exciting cause.

In such cases, which are quite rare, there is weakness or great readiness in the capillaries of some part to relax and yield to the distending influence of the fluid, which they contain; hence causes which are not sufficiently strong to excite consciousness of action in the mind of the patient or attention of the physician or friends, are, nevertheless, capable of disturbing the equilibrium between the distending and resisting forces of the vessels;—and by the subsequent yielding of the latter, more blood is continually admitted until they become over-distended and resist painfully when all the phenomena of inflammation follow in train. I have not had time to pursue this branch of the subject further; nor do I deem it necessary, and shall therefore close with the remark that organs to which in the economy of the system, a greater quantity of blood is sent, are for the time being more subject than other parts to inflammation induced in this way.

Art. III.—*On Milk Fever, and Abscess of the Mamma.* By J. H. Shearman, M.D.

In a former number of the Journal, I treated the subject of the diseases of pregnancy, showing that they all arose from the altered condition of the blood, consequent on, or incident to, the process of *gestation.* I propose in this article, to show that the diseases consequent on *lactation* arise from the same cause—the altered, abnormal state of the blood.

I have previously laid down the position, that health invariably requires the blood to be in its natural condition, as respects the number, the quantity, and the quality of its constituents. Excess, deficiency, or impropriety of the constituents of the blood, is fatal to the pretensions to health.

All poisoning—all fever—all inflammation, indeed all disease, is attended with, preceded by a change in the condition of the blood. If a person die from taking opium, arsenic, prussic acid, or any other mineral, vegetable, or animal poison, the cause of the mischief is, the poison in the blood, and the change produced in its constituents.

It is true, that certain philosophers have propounded to us that there are some poisons which do not operate upon the blood, but simply on the nerves, or even—finer still—the nervous influence. For my part, I have no fear of such poisons. If they do not chemically act upon the blood, there is no cause to be afraid of them; water itself cannot be more harmless. In what way do laughing gas, chloroform, and ether operate, but on the blood, by being inhaled? In what way do these substances cease to operate, but by being exhaled, or passed off from the blood some other way? The philosophy of matter, whether organized or unorganized, is one of tact and contact—composition and decomposition—formation, deformation and transformation; and all attempts to elude this—the true Baconian philosophy—end in transcendental fooleries, and lead men to those regions, where "entity and quiddity the ghosts of defunct bodies fly."

The condition of lactation is a natural one, not necessarily diseased. The glands of the breasts have been enlarging and multiplying during gestation, preparatory to their function being called for; and as soon as the sustentation of the fœtus in the womb, by the direct use of the mother's blood ceases, the process of sustentation at the mother's breast commences; by the infant imbibing, digesting, and assimilating the mother's milk.

In this phenomenon of lactation, two opposite processes take place in the mother and child. In the mother, the blood which formerly went by the uterus to supply the wants of the child, now goes to the breasts to form milk for that purpose. In the child, the blood which formerly was supplied direct by the mother, has to be made from the milk by the process of digestion and assimilation.

Both are chemico-physiological processes, and neither of them ought to be attended with disorder—yet how often both are. So frequent, indeed, is the occurrence, that it is regarded as the natural condition. I hope to show that this is an error of a gross and dangerous kind; and that manifest impropriety and mismanagement on the part of the mother or her attendants, or both, are the remote, if not the proximate cause, of most of the ailments of lactation, as well as of gestation.

The process of labor is a violent action of the parturient organs, but it is a natural process. It is not like fever, nor inflammation, nor a rupture, nor a luxation, nor a wound, nor a fracture. Any of these, indeed, or all of them, may accompany labor, but none of them is the labor.

The functions of mastication, deglutition, digestion, defæcation, and micturition, are not more strictly natural than is parturition. Any one of them may be accompanied with disorder and danger, and may terminate in death; but it is by no means the necessary conquence of such functions.

On the birth of a child, and expulsion of the placenta, there is of necessity, an escape of a certain portion of blood from the placental attachment of the uterus—in most cases sufficient to be considered a large depletion—ample enough to relieve the turgescence of the vessels, whose functions of nourishment have just ceased so suddenly. I suppose that in every natural labor, the quantity of blood lost is exactly what is needful to be abstracted. The lochia are simply the drainings which ooze out from the divided vessels, until they are united and closed.

Now begins a new process—the formation and secretion of milk. This is as natural a process, and ought to be as healthy a one, as the formation and secernment of bile or urine. The milk is a composition which differs from blood in many important particulars. It contains more water, more of the phosphates of lime, potash, magnesia, and iron; and contains caseine butter and sugar, which blood does not contain; and it does not contain fibrine, albumen, and hematosine, which are found in blood.

The elements of nutrition were *decerned* from the blood of the mother, in the body of the child, whilst in the uterus; now they are *secerned* from the mother's blood in the breasts. The condition of the child in the uterus did not require more than a portion of the contents of the blood which was sent there, and that condition is still existing.

Bone for the frame-work of the body; brain and nerve for the sensations; skin and fat, for covering and warmth, are the principal things required. The milk contains the elements requisite for these purposes. The muscles of an infant, are a very slight species of fibrinal texture, compared with those of a more matured person, and every tissue is less firm and solid, than in those of man and woman. The flesh of a child, indeed the flesh of all young animals, is tender and delicate.

The food for young persons is, therefore, of necessity, different from that of older persons, and infants require lactaceous food, not merely because it is provided for them, but because it is their appropriate sustenance.

The secernment of milk from the blood, takes some elements away from it, which are necessary to its integrity, and by consequence disorders it if not restored. When this first occurs, there is a change in the sensations and appetite. Usually there is some headache, loss of sleep, and slight fever. Is this wholly natural? Let us examine.

The elements which are taken out of the blood, are the phosphates of lime, and alkalies, a highly nitrogenous compound, caseine, and the triple compounds of butter and sugar. The blood, then, instantly lacks these elements; and to keep it in its proper order, must have such food as contains them. What is the usual food for women under such circumstances, as prescribed by grave and learned physicians, growling and dogmatic nurses and grandmother-taught mothers?

Gruel, composed of the *albuminous* products; fluids containing the *farinaceous* or starch products; panada or bread and water; and *gelatinous* fluids; some of them with salt, some with sugar, and a little spice. These substances cannot supply what the blood needs, and they are very frequently so distasteful, that they are taken as medicines, or, as it is curiously termed, "dieting." Of all ignorant assumptions of our vain conceit, that of interfering with the instinct of appetite—which is the infallible demand of infallible laws—and not only placing our arrogant veto upon compliance with it, but reversing its orders; this is certainly the height of impudence in "learned ignorance."

Happy is it for the mass of mankind, that they are so seldom under "sound medical surveillance;" or they would never have one day's comfort nor enjoyment; and by consequence, never have a day's health. Do but deprive a man of his agreeable food, and give him a little calomel and antimony at night, and a little Epsom salts in the morning, and if he ever be well, a perpetual miracle must be wrought for him.

If a woman, performing the important function of lactation, at any other period of its existence than the parturient one, is compelled to live on such diet as the lying in one, she is pretty certain to have fever, with headache and diarrhœa.

How utterly unobservant the mass of medical men are, on the subject of food and appetite. The daily occurrence of person's loathing one kind of food and yet longing for another, of person's persisting in long-continued fasting on one sort of food with a constant appetite for food of another sort, of irremediable disorder attending one sort of diet and restoration to health attending another, seems to have no effect on the mass of medical men. Until an authoritative precept on the subject occurs in some standard work or is uttered by some famous lecturer, all the phenomena of nature, are worth nothing as instruction to the practitioner.

A woman, of apparently good health but anxious countenance, carrying a large child in her arms, called on me for advice for a distressing headache. I inquired if she suckled the child which she carried. She said she did. I wished to know what her food was, and she informed me it was bread and butter or crackers and tea. I inquired if she could not take any other kind of food. She said, she longed for good meat and vegetables and fruits, but she had been forbidden to use them. I told her to consult her sensations and trust to those, in spite of all the advice in the world. She did so, and her headache left her.

A lady of my acquaintance, but not my patient, who had suckled two or three children, and took great interest in poor married women, thought that there was no necessity for catering to the appetite so much in suckling; and that if the rich were to show how easy it was to suckle a child through the night, on a basin of gruel, instead of mutton chops and other substantials, it would be a good example and lesson for those who could not so easily procure them.

She therefore commenced her gruel regimen, and in spite of some qualms of stomach, and quakings of head, with womanly perseverance continued her gruel, until vomiting, purging, and fever ensued. Her husband being a man of good understanding, traced the whole of her disorder to the change in her food. She returned to her former substantial diet, and was cured of her maladies, and meddling with the diet of the poor.

To me the horrors of the Inquisition, where the ignorant bigotry of the priest racks the body with tortures, in the vain hope of crooking the mind that the divine laws of intellect make straight, are not more dreadful than the ignorant presumption of the "medicine man," who inflicts upon his "*patients*," (too true alas,) the denials of his prohibitions and the endurances of his administrations, in the vain attempts to force an organized being into order and health, by violating the immutable and irresistible laws of its nature.

If, when a woman commences the function of lactation, she have that kind and quantity of food, which her appetite requires ; if she have good air to breathe, light enough to minister to the activity and gratification of the senses, warmth enough for comfort, and no more, as much of the external application of water to the skin as will purify and invigorate it, as much of the internal use of water as is required by her sensations, and "the liberty of the functions ;" there is little doubt of her being in health. Woman was designed by God to bear and suckle children, and it is high treason against the wisdom and goodness of the Most High, to suppose that she must forfeit her health to perform her duties.

In most cases of lactation that have come under my notice, there has been a constant strife waged with nature, by the mother and her advisers, from first to last. The woman who undergoes the process of parturition and performs the office of suckling is removed from the influence of the benign laws of her nature, and put under the care of some man, who has no knowledge of the right or wrong of her condition, acquired by observation; but is a very obsequious follower of the "routine" of "obstetrical science," "practice of midwifery," and "puerperal observations," of renowned authors, or famous lecturers.

She is required to give up her judgment and feelings to the direction and control of old wives and nurses, and almost everything which she desires is forbidden and everything which she dislikes is forced upon her. A drink of cold water, though longed for like air by a fainting person, is denied her, on the pretence that it would chill her milk, and disorder her infant. Fruit is forbidden on the assumed ground, that it would cause "acidity." Butter and fat are "bilious." (Oh, that some one would tell us what "bilious" means!) Vegetables are "windy." Pastry is "heavy;" new bread is "poison." There is nothing left but dry bread, lean beef or mutton, oysters and crackers.

This is not the place for a dissertation on food; but as the food of a body composes the blood, the fluids, and the solids of that body, the more delicate and important the processes and functions to be performed, the more discriminating and particular will be the appetites and desires, and the more certainly will disorder ensue if the proper food be withheld or unsuitable food be administered.

Once, let the blood lack some of its requisite elements, or contain too much of others, and there is at once a breach of the corporal soundness, and organic integrity. The particles of the solids will not be deposited as in health; the fluids will not be secerned in their normal condition; the caloric of the blood will not be expended on the life and activity of the organs and muscles of the body; and therefore, of necessity, will accumulate, and shivering and heat, headache and nausea, lassitude and pain, will necessarily occur—fever will appear.

In most cases of lactation, when the milk begins to flow, there is swelling of the breasts, with some heat, and pain. The swelling is occasioned by the large quantity of milk which is secerned, compared with the quantity which is used by the child. The heat is caused by the pressure obstructing the circulation, so that the caloric is not only *mechanically forced* out of the solids and fluids, but also *chemically accumulated*, and given off in a free state, instead of being *chemically united* with the solids and fluids in the processes of life. The pain is produced by the two former conditions.

It is to me extremely doubtful, if any case of painful swelling of the breasts ever occur to a woman living according to the instincts of her being—obeying the laws of her nature. The only cases of it that I have ever known, have been invariably caused by, or at least accompanied with, the most marked neglect of, or resistance to, the demands of nature.

The room has been kept hot, close, and dark; the body covered with a disagreeable excess of clothing—the breasts especially have been loaded, and all air carefully excluded from them. The smallest portion of cold drink has been forbidden like poison; and hot drinks administered, as though the preservation of life depended upon them. When the breasts began to fill, heating applications were applied to them, as brandy, oil, camphor, and other stimulants. If, indeed, the breasts had not swelled, they would most wonderfully have resisted every inducement to swell.

To such extremes of opposition to nature is this puerperal treatment carried, that it is thought dangerous to be clean and wholesome. To wash the body, and change the clothes and sheets, would be deemed an act of great outrage to the woman—inevitably giving her cold and producing fever!

Let us now see what part the medical attendant commits in these outrages on nature. He administers some sort of medicine, usually such as opium, antimony, calomel, nitre, rhubarb, senna, castor-oil, magnesia, &c. If he do not, what sort of a doctor is he thought to be? The observation of a nurse to me once, during my attendance upon a very sensible lady, who knew that obedience to the requirements of her being was of more value than many medicines, is precisely in point. "Of what use is a doctor," said this nurse, "if he do not give medicine, and interfere with diet?" Well-spoken ignorance.

The medical attendant has been educated to meddle with every thing in his way. He directs the light to be excluded—air to be carefully shut out—extra covering to be put on—"a gentle perspiration to be kept up"—(what a sweet, simpering piece of cataplasmal advice!)—recommends some particular sort of gruel as very "nourishing"—chicken soup or tapioca pudding as "strengthening without leading to fever or inflammation"—and suggests that too frequent change of bed and body linen is "very weakening!" "An absolute gentleman, full of most excellent differences, of very soft society, and of great showing!"

If there be any fever under all this maltreatment,—and why should there not be?—some calomel and castor-oil are given as "revulsives;" and some "neutral salt" as a "refrigerant." If there be aphthous mouth and tongue—as how could it be otherwise?—some soda and magnesia are administered, in order that the "acid crudities" of the offending stomach may be "corrected." Profundity of ignorance!

Were the physician but for one week compelled to suffer his own regimen, he would learn more of physiology and true pathology than by a three years' course at any college in the world. Suppose a person call upon his watch-mender for advice and remedy for some disorder of his gold repeater; and after looking, listening, thinking and considering, the watch-mender prescribes for it, "after the art of the apothecary."

He drops a little oil into the machinery, and tries what that will do. If that do not succeed, he next drops in a little caustic alkali, some potash or ammonia. If that be unsuccessful, he tries some powerful acid, the nitric or sulphuric. If this be unavailing, he boils it like an egg for fifteen minutes. If this should fail, he puts it into ice. Should none of these succeed in remedying the mischief, there is nothing left but to submit to the condition, after such a display of science has been expended without any sensible avail.

Such is the treatment of a woman in confinement and lactation. Darkened and suffocated, sweated, purged and starved, forbidden all agreeable food, and forced to take what is disagreeable, and swallow more or less of poison. What can a woman be, under such circumstances, but a mass of misery and wretchedness? Once let her follow the unerring instincts of her nature, and parturition is at once relieved of half its dreaded sufferings. An Irish peasant's wife, or an Indian Squaw, if she can have what her unpoisoned, unperverted instincts want, is better off in the performance of her functions of gestation, parturition and lactation, than the queen of any empire in the world.

I shall pursue this subject in the next number, when I shall treat more of the practical application of my views.

ART. IV.—*Cases of, and Remarks upon, the Use of Chloroform in Natural Labor.* By EDWIN B. STIMSON, M. D., Resident Physician of New-York Lying-in Asylum. [Read before the New-York Obstetric Society, April 24th, 1848.]

BY the gratifying results of Prof. Simpson's practice with chloroform in cases of parturition, I have recently been induced to repeat his experiments under similar circumstances. And I now propose offering the gentlemen present a statement of my success with the article whose claims on our attention have been so strongly urged by the learned professor. Merely premising it was not without having heard from others or having entertained in my own mind objections against the use of anæsthetic remedies in labor, that I entered upon the employment of chloroform. Congestion of the brain, exclusion from the lungs of oxygen, an active and permanent vitiation of the blood, uterine hemorrhage from the absence of the usual contractions of the womb after delivery, delay from irregular uterine action, and last, though by no means inconsiderable with many persons, an interference with the operations of nature, and a contemptuous design upon the decree—"In sorrow shalt thou bring forth children"—were all presented as possible, and many of them as most probable objections to the practice of superinducing anæsthesia during labor. The following cases may contribute towards rendering our knowledge in the foregoing respects, less conjectural.

Case 1.—January 20th, 1848, Sarah ———, Madison-st., æt. 19, primipara; first stage, 6 hours; pains active at intervals of 7 minutes, advancing the head with each recurrence. When the tumor of the scalp began slightly to separate the labia, chloroform was inhaled from a handkerchief. Partial insensibility followed in two minutes; the patient answered questions sharply directed, and was conscious of a prick or pinch of the skin; pains recurred at intervals of 12 minutes—were short and spasmodic, suddenly advancing the child from the retreat it had effected during the absence of uterine contraction. As anæsthesia continued, the patient gave evidence of suffering by a low moan, writhing and corrugation of the brow whilst a *pain* was upon her. A larger quantity of chloroform being administered, the woman ceased to give the least sign of sensibility. The pulse fell from 80 to 65 per minute, the respiration became deep and stertorous, and the action of all voluntary muscles suspended. The uterus continued its expulsive efforts, and succeeded in one of its contractions in expelling the child. Ten minutes afterward, it perfected delivery by discharging the secundines. Removing the chloroform, and allowing consciousness to return, the patient voluntarily said, "she did not know the child was born," that she "never would have a child without such medicine, cost what it would," and as an earnest of her gratitude for having it in this instance, made all possible haste to render her accoucheur, *l'amende d'or.*

Case 2.—January 22, 1848, Bridget ———, æt. 25; primipara; first stage, 10 hours; the os uteri fully dilated, the occiput resting behind the inferior portion of the symphysis pubis, and the uterus acting energetically. Chloroform was inhaled till perfect apathy resulted. Pains immediately diminished in frequency, force and consequent suffering. Pulse fell from 85 to 65; patient breathed, and had every other appearance of being in the enjoyment of a sound sleep. During the second half hour of administration, uterine contractions were carried suddenly to their highest point, and as suddenly relaxed. Third half hour, the pulse flew from 65 to 100—falling with a fresh application of the remedy, and rising as its influence subsided. By one of the jerky contractions of the womb, the child was expelled, without consciousness on the part of the mother.

No accident or unpleasant symptom succeeded delivery.

Case 3.—January 25, 1848, Ellen ———, æt. 25, primipara; in active labor 5 hours, when the mouth of the womb was found perfectly dilated; the occiput resting behind the inferior half of the symphysis pubis; uterus acting with usual vigor at intervals of five minutes, occasioning more than ordinary pain at this period of labor. The patient could with difficulty be restrained to her room; her shrieks were long and piercing, and her supplications for relief from her agony most imploring. Placental snuffle distinct; fœtal pulsation, 120. Chloroform was inhaled from time to time till the voluntary muscles became lax, the lower jaw fallen, the eyes closed, the respiration deep, and unconsciousness complete. During the existence of this state, the uterus seemed unaffected by the inhaled vapor in all respects, save the intervals of its repose, which were irregular in duration, sometimes very brief, at others extended much beyond their usual length. The countenance was somewhat flushed, this was however the only evidence of unnatural vascular determination.

Surface of the body and extremities continued natural in color, temperature and moisture. The fœtal heart in this, as in preceding cases uninfluenced by the inhalation. Labor terminated favorably during maternal unconsciousness.

Case 4.—January 29, 1848, Ann ———, æt. 33, confined with her second child, was relieved of great distress by a few drops of chloroform, after the head had entered the pelvic cavity. The temporary relief afforded by so small a quantity was extended at the entreaty of the patient, by a more liberal administration. Succeeding insensibility produced no variation in the activity of the womb; the child was soon born; the placenta followed in five minutes; and in no case have I observed less sanguineous discharge result from delivery. The patient awoke from her apparent sleep to express her thankfulness for the pain she had been spared.

Case 5.—February 7th, 1848, Ellen ———, Thompson-street, æt. 22; of nervous temperament, had been in labor 8 hours, when the os uteri became fully dilated; the head of the child resting on the perinæum—the patient almost frantic with pain at each contraction of the uterus. She "had heard of something to put them asleep when the baby was born," and begged for some of the medicine from my hand. Anæsthesia was produced, during which the woman was safely and expeditiously delivered of a male child. The pulse was observed to diminish in frequency as the influence of chloroform was first felt by the system. The uterus also, for several contractions, was less powerful—it afterwards regained its former strength and efficiency. Respiration became and continued, throughout the chloroform exhibition, rather slower and deeper than natural.

*Case*6.—Bridget ——, æt 19, primipara; employed chloroform to annul the pain that would arise from the passage of a child through the inferior strait of the pelvis. The labor had progressed very favorably till the head rested on the perinæum, when inhalation commenced; the patient after a few seconds' singing passed from a brief stage of exhilaration to a state of partial, and finally of perfect sopor. Neither the pulse nor the uterus was materially affected. Delivery terminated whilst the patient seemed to sleep, awaking from which she inquired whether she "would not sooner get through since she had had a fine sleep." Upon being assured the child she heard crying in an adjoining room was her own, tears of joy and gratitude fell down her cheeks.

Case 7.—February 24th, 1848, Mrs. ———, Madison-street, a large woman of nervo-sanguine temperament, about to be delivered of her 9th child, inhaled chloroform, when the head had arrived at the inferior strait. In two minutes she commenced a muttering song, soon became silent, and at length apathetic. The pulse feebly beat 50 per minute, the uterus omitted several contractions, when it was thought prudent to withhold the vapor. Consciousness returning, it was again breathed, though more sparingly; the uterus meanwhile entered upon duty and shortly afterwards expelled its contents satisfactorily to all parties. Some difference of opinion existed in the minds of the foregoing and the present patient, for whilst the former anticipated benefit from sleep, the latter asked whether "it was possible for her to get well as soon from having slept as she otherwise would do;" scarcely crediting the statement of her friends that her child was in the hands of a nurse.

Case 8.—February 27, 1848. Elizabeth ——, Walker-street, æt. 23; 2d child, chloroform-inhalation commenced when the head of the child occupied the lower portion of the vagina. A few seconds of incoherent muttering were followed by hurried breathing, (50 respirations per minute); a feeble, indistinct pulse, (60 beats per minute); and an arrest of expulsive efforts. In the course of 30 minutes breathing became more natural, the strength of the pulse restored, and the progress of the labor advanced. Patient soon afterwards ejected the fluids contained in her stomach without apparent effort or consciousness; subsequent to which, nothing untoward occurred. The woman was happily delivered during anæsthesia.

Case 9.—Mrs. ———, Centre-street, æt. 20, primipara; found at the 8th hour of labor, the vagina bathed in mucous; the membrane ruptured, the head low in the pelvis, and the pulse 80 per minute, vigorous pains recurred every 10 minutes; patient's sufferings from the forced expansion of the soft structures unusually great, inhalation of chloroform permitted, a deep sleep and a suspension for 25 minutes of uterine contractions were the only perceptible consequence of the inhalation. The uterus returned to its former degree of activity as the first general impression of chloroform subsided; the pulse and respiration remained natural; a happy smile occasionally played over the countenance of the woman, who in half an hour awoke to be informed of her new relation to her family—with an expression unchanged, an eye bright and steady, an intellect unobscured and with perfect freedom from headache, nausea, or other unpleasant sensation.

Case 10.—Mrs. ———, Mott-street, æt. 20, primipara; inhalation of chloroform commenced whilst the corrugated scalp slightly separated the labia pudendi. The case progressed and terminated in all essential respects, similarly to the case last detailed. Respiration and circulation were slightly affected by the agent. The uterus under the first general impression ceased action, but at the end of a quarter of an hour resumed its contractions; 5 minutes only intervening between each.

REMARKS.

It may be observed of the foregoing cases,—1st, that the frequency of the pulse was diminished during *perfect* apathy;—it was small, thready, and if the inhalation was continued a few moments longer, became almost imperceptible. 2d, The respiration grew hurried, short, and interrupted; varying, however, with the degree of anæsthesia produced. If the vapor caused sleep only when attendant circumstances were favorable to repose, the breathing was in no wise different from that of natural slumber. But a marked alteration in the function of respiration attended the state of profound insensibility. 3d. The muscular system was relaxed proportionately to the quantity of the vapor inhaled. Without being sensible to pain, the patient sometimes flexed and extended the limbs, or aided an expulsive effort with the action of the abdominal muscles. If at this period she received a few more inhalations in quick succession, her limbs lost all muscular resistance, and the body lay motionless. 4th, If the administration was carried so far that the pulse fell in frequency, the respiration short and hurried, the muscular system lax, and unconsciousness *complete*, uterine contractions were temporarily suspended. The period of their absence was from fifteen to thirty minutes. When they re-appeared—as they would do notwithstandthe most profound sopor—they were wanting in their original force. Yet, no doubt, their efforts promoted delivery equally with former throes, as with a diminution of force there occurred less resistance from the soft structures of the pelvis. However, such an overpowering impression was seldom necessary for procuring the desirable effects of chloroform,—a few cases of its exhibition in natural labor, teaching that the object in view should be rather to tranquillize an excessive susceptibility to painful impressions, than utterly to set aside the power of perception. Especially does this instruction regard the interval between the commencement of apathy and the moment the head is about to glide over the perinæum. 5th. In no case was there an unusual loss of blood; indeed, I believe I never witnessed, successively, the same number of deliveries with so trifling hemorrhage. 6th. In every instance did the uterus expel the placenta within twenty minutes after the birth of the child. 7th. The fœtal heart beat whilst in utero the same after as before the administration of the vapor. The children born were vigorous.

The chloroform has always been inhaled from a handkerchief.—This mode is objectionable on two grounds: first, it is wasteful; and secondly, the vapor that escapes sometimes inconveniently affects the attendants. But the facility it offers for introducing the agent under the various circumstances and positions of the patient more than counterbalances the saving an apparatus would ensure.

For a calm and clear restoration of the mental faculties, it was found very important after withdrawing the vapor, to allow the patient to sleep undisturbed by the least noise or motion. So desirable was it deemed that the patient should sleep until the odour of chloroform was no longer perceptible in the breath, that in one or two instances I kept up the influence of the vapor till the placenta had been expelled, the soiled clothes removed, and the bandage adjusted, leaving no cause for disquietude. If the patient be awakened before she is capable of recognizing her companions, and clearly understanding her new relations, she is likely to remain much longer confused than if she had been left unmolested.

On the whole, does the experience afforded by the foregoing cases allow us to recommend chloroform in natural labor? It certainly does not prohibit the article. It rather refers the question of its administration to the patient's disposition, so long as our experience does not furnish evidence of an injurious effect. If she chooses to be relieved from pain by a remedy which has the power to do so as its only claim on her consideration, she may have the article administered during the protrusion of the head from the pelvis; and our previous knowledge of chloroform, under similar circumstances, will warrant its exhibition.

This anæsthetic agent will probably be found more useful in preternatural than in natural labors, if we may estimate its suitableness in certain irregular conditions by its operation in a regular delivery. Thus it may be employed to suspend uterine contraction when the occasion demands version; it may be used in cases of irregular contraction of the uterus retaining the placenta, and for arresting the recurrence of parturient convulsions. There are accidents, too, which are avoided by the use of the vapor; hemorrhage is not as likely to occur with as without it, from its property of reducing vascular activity. Rupture of the uterus will not take place sooner from its influence; and from rendering the nervous system less mobile, convulsions may be averted.

ART. V.—*An Essay on the Nature and Curability of Heterologous Tumors.* By N. S. DAVIS, M. D.

IF the deductions, stated at the close of our former article, should be sustained by further and more extended observation, they will lead directly to practical results of the highest importance. I am well aware that the bare proposal to render carcinomatous and other malignant diseases curable by ordinary medical means, will be much more likely to meet with the smile of scepticism than the serious and patient consideration of the profession. But of two things I am fully satisfied, viz., that the prevalent opinion concerning the primary local character of this class of tumors or deposites, is entirely erroneous, and that the consequent practice of relying almost exclusively on excision as a means of cure, is wholly useless. Hence, unless we are willing to abandon this unfortunate class of human sufferers to their fate, and leave them where they are, indeed, now left to a very great extent, i. e., in the hands of the very lowest and most ignorant class of quacks that afflict the world, we must, as a profession, throw aside our prepossessions, and patiently re investigate the whole subject. And in doing this, we must not look to the composition and structure of the tumor alone, or its effects on the surrounding tissues; but we must note with equal care the previous condition of the whole digestive or assimilating apparatus, the quantity and quality of the food and drink, the quality and mode of dress, the quality of the air occasionally or habitually inhaled, the condition of all the excretions, and the tone of the patient's mental feelings. By pursuing such a course patiently, and with unbiassed scrutiny, through a large number of cases, I have no doubt but correct and reliable conclusions could be deduced concerning both the primary causes, and the particular organs through which they act, and the disturbance of whose functions leads directly to the morbid nutrition or deposite. And if so, we should as certainly find ourselves capable of preventing and curing this as any other class of chronic diseases. But, how is such an investigation to be made? The number of cases coming fully under the observation of any one practitioner is too limited for the purpose; and in our well-regulated hospitals this class of patients are seldom received except for the mere purpose of undergoing an operation with the knife.

I know of no mode of accomplishing this desirable object fully and satisfactorily, except by the establishment of an institution devoted exclusively to the treatment of malignant or carcinomatous and scrofulous diseases. Such an institution, under good and faithful management, would undoubtedly gather in a sufficient number and variety of cases to afford the most ample field for investigation. And it would also do more to snatch this numerous and truly miserable class of human sufferers from the hands of ignorant empirics than any other movement that could be devised. Indeed, if I were sure of meeting the countenance and approbation of the profession, I should be strongly disposed to volunteer a trial of the enterprise. At present, however, we cannot go beyond the general conclusions already stated in the two preceding articles; and hence, on them must be based our ideas or principles of treatment. These may be stated as follows:

1st. To remove or avoid the primary causes of the disease in each individual case.

2d. To correct those functional derangements resulting from the action of said causes.

3d. To remove the local effects, i. e., the deposites or tumors.

Want of due attention to the first two propositions named, is doubtless the cause of much of our ill-success in the treatment of this class of diseases. Especially is this the case in regard to all the varieties of tuberculous and carcinomatous deposites. There is great proneness. both on the part of the patient and the physician, to confine their attention too exclusively to the local manifestation of disease. And even eminent medical and surgical teachers, who acknowledge the constitutional origin of the disease, still direct the attention of their students to the local deposit, representing it as the malignant focus or fountain from which radiate through the lymphatics, that specific poison which contaminates all the fluids of the system, induces the peculiar cachectic appearance, and finally destroys the patient. Hence arises the tenacious adherence, on the part of most surgeons, to the practice of extirpating all carcinomatous tumors. "This should be done," say they, " as early as possible. to remove the poisonous fountain before it has contaminated the whole system." But unless all experience, analogy and sound reasoning fail to be applicable to the investigation of these diseases, both the practice and the reasons on which it is based are as absurd as it would be to attempt to drain a lake without cutting off the streams that flow into it. I say experience, because I have already shown that so far as reliable statistical facts can be gathered, such operations, instead of removing from the system a poisonous fountain, actually diminish the chances of life. And I have been informed by one of the most eminent and experienced surgeons in this country, that he has never known a patient survive an operation for the removal of a cancer three years in good health; except in cases where the disease was cutaneous merely. No one at the present day, thinks of curing scrofulous tumors by extirpation, yet it is but a comparatively few years since they were regarded almost as incurable as carcinoma now is. But it was no sooner satisfactorily ascertained that the local scrofulous deposite was the mere result of a constitutional derangement; and that derangement essentially consisting in imperfect assimilation, than successful hygienic and therapeutical means were devised for their cure. It would be of little avail, however, for us to apply our therapeutic remedies in the treatment of scrofula, so long as the patient was allowed to remain exposed to the full influence of its most active causes. And so has abundant experience demonstrated the equal inutility of treating carcinoma by extirpation or any one of the many pretended specifics, without first ascertaining and correcting those functional derangements that give rise to, or, indeed, constitute the constitutional condition on which the local deposit depends.

Hence, every system of rational treatment must commence with an attempt to fulfil the first indication named, i. e., to remove or avoid the exciting causes of the disease. But it may be said that these causes are so obscure as to be little understood; and their avoidance or removal is therefore a mere matter of guess-work in the treatment. I am satisfied that this idea is owing, in a very great measure at least, to a wrong impression in regard to the nature of these causes. With the mind strongly impressed with the obstinate and malignant nature of the local disease, the surgeon has ever been prone to overlook those sources of disturbed assimilation and nutrition to be found in the ordinary circumstances and habits of patients; while it is here, and here alone, that he has reason to find success in his search. I have now under my own observation, five cases of carcinoma in the female breast. In three of them, mental depression and anxiety arising from family afflictions, had exerted a strong influence for many months previous to the first appearance of the local disease; in another it seemed to commence as the sequelæ of a severe attack of typhus fever; and all of them were addicted to the very liberal use of tea and coffee. Indeed, I have never seen a case of true carcinoma, in which a careful and minute examination of the patient, did not indicate the existence and operation of causes abundantly sufficient to induce disorder in the functions of assimilation or excretion, or both. And among these causes, so far as my own experience goes, mental depression and anxiety occupy a prominent place. Hence, the first object, in reference to the treatment of these diseases, is, by a minute examination of each individual case, to ascertain and remove as far as possible all remote and exciting causes. The second is, to correct those functional disorders which have resulted from the action of the causes just alluded to. In very many cases this may be accomplished by simply fulfilling the first indication, viz.: a removal of the causes. But, on the other hand, it should constantly be borne in mind that disordered functions may continue an indefinite period after the primary exciting causes have ceased to act. In regard to the organ or organs, whose function is most frequently disturbed as the incipient step towards the formation of tuberculous and carcinomatous deposits, our medical literature does not afford sufficient data to warrant the expression of a positive opinion. Dr. McIlwaine of London, refers the primary derangement in a large majority of cases to the liver. And this opinion receives some confirmation from the fact, that this organ is by far the most frequent seat of internal cancerous deposit; and its disordered action is very plainly manifest in many cases, in which the local disease is in the breast or some external part. My own experience would induce me to place the primary link in the chain of morbid actions, most frequently in the organic system of nerves, next in the liver, and third in the uterus. The influence of the nerves over the capillaries and the process of nutrition, has been too clearly demonstrated by the experiments of Miller, Philips and others, to admit of doubt. And the well-known influence of sudden and strong mental emotions, in changing the frequency and force of the pulse, the quantity and quality of many of the secretions, and retarding or suspending digestion, should have induced the profession, long since, to give more attention to the influence of the mind as a cause of organic disease. Long-continued mental depression, especially if accompanied with anxiety, greatly diminishes the nervous energy, and thereby retards or deranges both the assimilative and excretory functions. Hence the blood is imperfectly elaborated, and that condition most favorable to the formation of organic diseases is induced. The following case will serve as an illustration of this form of the disease. Mrs. P., aged 50 years, came to me some months since with an open or ulcerated cancer in the left breast. She had ever been an active industrious woman, and had never suffered any severe attack of disease; although she had been for many years in the habit of taking a full dose of calomel occasionally for what she termed a bilious state of the stomach. This she had often done without the advice of a physician, and, judging from her own account, she had much impaired the functions of the stomach and nervous system thereby. Her menstrual functions had ceased entirely six or seven years previous to her visiting me. Her diet had been plain and judicious, but she had long indulged freely in the daily use of tea and coffee, and her bowels had usually been slightly costive. During the last two years she has been almost constantly laboring under a state of mental depression and anxiety, sufficient to produce wakefulness and much nervous irritability; and about eight or nine months since a small hard tumor was discovered in her breast, giving rise to occasional sharp and severe pains. This continued to enlarge for three or four months, and then became converted into an open cancerous ulcer, which is now about two inches in diameter with a hard or scirrhus base. Some of the glands above the clavicle, and also those in the axilla, are enlarged; and one of the latter is so situated as to obstruct in some degree the return of the blood through the veins, thereby causing considerable swelling and some pain in the arm. The countenance is care-worn and pale, the tongue clean, the pulse nearly natural, and the appetite good. Her skin is dry and husky, and she is still wakeful and restless. If we remember those well authenticated cases, in which a single fit of anger on the part of the mother, so changed the composition of the milk in her breasts as to prove poisonous to her child, and many other facts equally striking, we shall no longer regard it as a mere stretch of the imagination, to refer the origin of many organic diseases to long-continued mental depression and disturbance. What, then, are the plain indications of treatment in these cases? I answer; first, to counteract or remove as far as possible the mental depression by moral and social influences; second, to allay nervous irritability and promote a healthy state of the secretions; and third, to adopt such dietetic regulations as will best promote the healthy and perfect performance of the functions of digestion and nutrition. For the accomplishment of the first of these objects no specific rules can be given. Everything must depend on the enlightened judgment and discretion of the practitioner, and the particular circumstances of the case. The second indication is generally most effectually fulfilled by the use of anodynes and alteratives. The former must be given in such doses and repeated at such intervals as to subdue irritability and procure sleep at night. This latter object is of great importance in the treatment of all chronic diseases; for the absence of sleep alone exerts a strongly-disturbing influence over all the organic actions. The particular articles best adapted to the accomplishment of this object, are those that allay pain and irritability without constipating the bowels or lessening the secretions; such as the conium maculatum, the hyoscyamus, the stramonium, &c. Indeed, it is the highly beneficial influence exerted by these articles, on such cases of carcinoma as have their origin in mental depression and nervous irritability, that gave to the *conium* much reputation in the treatment of cancers among physicians of a former age. And it was their indiscriminate use in cases arising from entirely different causes, that has led to the idea of their inefficiency by more modern practitioners. The truth is, the profession has not yet got rid of the idea that carcinoma is a specific disease, arising from certain specific though mysterious causes; and that it must be cured, if cured at all, by specific remedies. Hence, if a remedy is reported to have acted beneficially in one case, it is straightway applied in a score of others without reference to their exciting causes or any other circumstances, and if not found equally beneficial is at once condemned as useless. Whereas, it is undoubtedly true, that carcinoma arises under as varying circumstances, and from as diverse exciting causes as any other disease. And if we would ever arrive at a correct and successful mode of treatment, we must study carefully these varying circumstances and diverse causes, and adapt our remedies to them in each individual case. If we do this, we shall find cases in which the use of anodynes alone will be of great service; others, in which there is coupled with nervous irritability marked derangement of the liver and digestive functions, where the union of anodynes and alteratives will be productive of the happiest effects; and still others, in which alteratives alone, or in combination with tonics, will be strongly indicated. I might detail cases illustrating these different varieties and the results of their treatment; But as these cases are all of recent date I prefer for obvious reasons, to withhold them for the present. In addition to the judicious use of therapeutic agents, proper dietetic and hygienic regulations are of the first importance. Pure air, cleanliness, and the avoidance of all articles of food or drink which tend in any degree to disturb any part of the digestive apparatus, should be rigidly enjoined.

Tea and coffee, if freely and habitually indulged, should be prohibited. If the patient be poor, and accustomed to coarse indigestible and oily food, this should be improved; or, on the other hand, if pampered with luxuries, these should be restricted. In a word, the diet should be good bread, milk, lean meat, rice, potatoes. ripe fruit, and cold water, all of which favor healthy digestion and the formation of pure and healthy blood. Such are the principles that should govern us in the treatment of these truly-formidable diseases; and if they are skilfully and patiently applied, I am confident that the result will not be wholly unsuccessful. In regard to the extirpation of cancers with the knife or with caustic, I should follow the rule, never to operate so long as the tumor was increasing. And for the simple reason, that the increase of the tumor shows conclusively the continued operation of its original causes, and while these continue, cutting away the tumor is simply removing the effect while the cancers remains to renew the deposite in the same place or elsewhere. But if, by previous constitutional treatment, the progress of the disease had been arrested and the various functions restored to a healthy standard, and yet, the bare presence of the local deposite during a period necessary for the absorption, kept the patient's mind depressed and anxious, it might be both desirable and proper to remove it with the knife.

ART. VI.—*Summary of Observations on Syphilis in Infants.* By N. H. CHESEBROUGH, M. D., Member of the New-York Academy of Medicine, Member of the New-York Pathological Society, etc. etc. [Read before the New-York Obstetric Society, January 29th, 1848.]

THERE are but few among that vast category of diseases which afflict humanity of greater interest to medical men, than the one I have chosen as the subject of this paper. Its prevalence is as widespread as the depravity and licentiousness of our race, whence the entailment of all its evils and sufferings flows, and its sad ravages amid the ranks of helpless infancy, with its attendant and consequent inflictions on the health and happiness of those from whom it derives its daily nourishment, furnish the most powerful and convincing testimony of the criminality of sexual impurity, that it were possible to adduce. But so long as the dissolute and unrestrained passions of men continue to exercise their pernicious sway over their judgment and conduct, or their free indulgence find scope and sufferance in the depraved morals of society or the absence of all penal enactments, will their dire consequences scatter the seeds of decay and dissolution among an infected offspring, poison the life's blood of mothers and nurses, and break up the peace, harmony and kind feeling of entire families. We shall in vain search for a more palpable illustration of the accomplishment of the threatened penalty of Jehovah for man's violation of his commands, "visiting the iniquity of the fathers upon the children," than is presented in the propagation of the disease under consideration. No curse more dire and fatal ever fell upon frail humanity, as the sure penalty of wrong-doing, that follows in the train of licentiousness: the saddest features of this dread curse being exhibited, in the premature blight, foul disease, or early death of a luckless progeny.

But I must moralize no farther. The thoughts just sketched, seemed pertinent to the introduction of my subject, and having thus taken a momentary glance at its hideous portraiture, you will perhaps be the more deeply interested in listening to the following summary of the opinions of writers on this disease, considered in its HISTORY, SYMPTOMATOLOGY, CAUSES and TREATMENT.

HISTORY.

Syphilis, as it is manifested in early infancy, is a diseases communicated from one or both the parents, or from the nurse. If the disease have been hereditarily transmitted, it proves clearly, that either one or both parents, have been at some time infected with the venereal virus. They may have *contracted* the disease several years previous to marriage, been treated for it, and imagined themselves perfectly cured, and their systems freed from all traces of the syphilitic poison. Yet their hopes are blasted and their sanguine expectations are mocked, as they witness the evidences of the poison still lurking in their own systems, in the untimely death or diseased frames of their offspring.

It is not essential, however, to the propagation of syphilis, that the parties shall have received the infection prior to conception; pregnancy having been known to have advanced to at least one third of its ordinary term, before the disease has been contracted and communicated to the mother, and yet the fœtus has become infected, as evinced at or shortly after birth. Frequently as the result of syphilis existing in a latent form in the parents, *abortions* repeatedly succeed each other, the embryo being often expelled in a state of putrescence. It is indeed denied by Ricord and Acton, that abortion under such circumstances, has any connexion with syphilitic parentage; but we have the testimony of so many equally distinguished and credible practitioners to the contrary, who strengthen their position by so strong an array of cases, illustrative of its undoubted truth, that we are forced to the conclusion, that the syphilitic diathesis *is* a cause of abortion, which can be only, but at the same time fully remedied by a course of treatment, which will eradicate from the diseased parents the remnants of previous infection.

The pages of the late medical journals teem with reports of cases in proof of the occurrence of abortion, and of the death of the fœtus in utero, from the existence of syphilis in its secondary forms, and in Mr. Ancell's Report on Syphilis, in Vol. 2, No. 2, of Ranking's Abstract, he observes, " It is again a matter of surprise with us, that any doubts should exist on this point; surely no man of any extent of practice, has failed to meet with instances. Syphilis has been recognised as a cause of abortion by most practitioners of midwifery and in our own practice, several unequivocal examples have occurred. The following case, continues Mr. A., will illustrate this point in reference to condylomata. A young gentleman had symptoms which were pronounced to be pseudo-syphilis, by two eminent surgeons; these disappeared under treatment, and his marriage with a young lady of the highest respectability was sanctioned by his surgical advisers. A few months after his marriage, he presented himself, with round copper-colored tubercles on the dorsum of the penis, for which he had been taking biniodide of mercury, from a prescription he had formerly received. His wife was at this time affected over the whole of the labia, the perineum, and around the anus, with a crop of mucous tubercles, and a fœtid discharge. The local symptoms were quickly relieved, she was pregnant and aborted at about six weeks. About this time, a copper-colored exanthematous eruption appeared over the arms, chest, and other parts of the body; an anti-syphilitic course was resorted to, the eruption disappeared, and the husband protested against continuing the remedies as being unnecessary. The wife became pregnant again, and aborted at about 4 or 5 weeks. Believing the abortions depended upon debility, she then went out of town for the benefit of her health, became pregnant again, and at the expiration of six months, gave birth to a dead child, with a desquamated cuticle. The chimera of pseudo-syphilis was now happily dismissed from the husband's mind, both himself and wife submitted to an anti-syphilitic treatment, of at least three months' duration, connection was avoided the whole of that period, the lady has since given birth to a healthy child at the full period, and both husband and wife have quite recovered their health."

Mr. Lloyd and Mr. Wade have stated " that cases of abortion, and of the death of the fœtus shortly after birth, were more common when the disease affected the father, than when the mother was the subject of the complaint. Why it was so, it was difficult to explain."*

I have mentioned that infantile syphilis may be communicated from the nurse. How this may occur, will be explained, when we come to examine the etiology of the disease. That syphilis is decidedly contagious from nurse to child, has been proved by many well-authenticated cases, and it has been on the other hand, as clearly shown, that the nurse may be infected by a diseased suckling. The minds of some medical men are, however, still undecided with reference to this latter point, while Ricord and Acton stoutly deny the contagiousness of syphilis, from a diseased child to a healthy nurse. Having investigated this subject with the utmost impartiality, and weighed the arguments and facts advanced on both sides, I am fully decided in the opinion, that syphilis is very often transmitted from child to nurse. Did our limits permit, I will venture to affirm, that I could produce such a mass of evidence in proof of such transmission as would remove every doubt, which you might have entertained on this point. I can only state a few leading facts in this connexion, and leave you to examine the entire subject at your leisure. Dr. Egan, in the course of some observations on syphilis as contracted from nursed children, expresses his views in the following strong language. "It is a fact worthy of notice, and to which out of many cases, I have not met with a single exception, that a nurse may continue to suckle a diseased infant with perfect safety to herself, so long as no abrasion of the cuticle, or ulceration in or about the nipple occurs: but when such take place, she can no longer continue to do so with impunity."

---

* **Ranking, Vol. II. No. 2, p. 137.**

Swediaur also remarks, "In all cases of the kind that have come to my knowledge, the nipples of the nurse were infected by syphilitic ulcers in the mouth of the child."*

Indeed, Dr. Colles goes farther than this, believing "that the disease may be communicated from an infected child, by mere contact." Dr. Calso makes the curious remark, that he has "never seen or heard of a syphilitic infant, although its mouth were ulcerated, producing ulcerations on the breast, when suckled by its own mother; whereas very few instances have occurred where a syphilitic infant did not affect a strange hired wet-nurse, previously in good health."†

The authorities just quoted, are strongly supported in their views by numerous examples strikingly illustrative of their correctness, which occurred in their own practice and that of others—and among them, one case is related by Dr. Egan, where the woman took charge of her daughter's child to dry nurse. "At this period there were sores on the verge of the anus of the infant, the mucous membrane of the lips was inclined to peel off, and the tongue was the seat of small white blisters. Shortly after birth, an eruption presented on its body, which had been alternately declining and re-appearing, up to the date of her attendance on it. She likewise stated, that she was constantly in the habit of kissing the child during the time its mouth was affected, and more than once applied her lips to to the sores on the arms." This woman shortly afterwards became affected with secondary syphilis, which it was evident was communicated by mere contact, "without any apparent breach of surface."‡

According to M. Rizzi of Milan, if a woman contract specific ulcerations on the breast by suckling an infected infant, mucous tubercles very frequently develop themselves on the vulva, and about the anus; but this, it is stated, is not all; the syphilis, although secondary, is transmissible by contact, so that a perfectly innocent woman may communicate the disease to her husband; and it behooves the medical attendant to be well apprised of this fact, as upon his knowledge of it, not only the health, but the peace of mind, and the honor of individuals must rest. Of one hundred individuals with chancres on the breast from impure lactation, or on the mouth or throat, derived from contact with an infected infant, thirty-four had tubercles of the vulva, nineteen syphilitic angina, two iritis, fourteen tubercles of the vulva and angina simultaneously, five tubercles of the vulva, and others disseminated over other parts of the body, of divers complicated symptoms, six tubercles of the vulva, angina, tubercles on the skin, and iritis, and nineteen no secondary symptoms."*

---

* Braithwaite, No. 13, p. 286.

† Ranking, Vol. II., No. 2, p 236.

‡ Braithwaite, No. 14, p. 225.

SYMPTOMS OF INFANTILE SYPHILIS.

Not unfrequently this disease exhibits itself in the child at birth, by the most unequivocal indications, so that a practitioner, at all familiar with its characters, cannot fail to recognise it. The child may, however, be born apparently healthy, in every particular, and the disease remain undeveloped for several weeks or months. M. Rizzi has furnished the following statistics, relating to the period of its development. "In fifty-three infants, the disease manifested itself one month after birth in thirty-three; at the expiration of two months in eleven; of three months in four; of four months in four; and in one only after the expiration of eight months "†

"A universal desquamation of the cuticle, a hoarse squeaking voice, copper-colored blotches, a scaly eruption upon the chin, an unnatural redness of the anus, are the common symptoms which Mr. Hey sets down, as proofs of syphilis, in very young infants."‡

According to Mr. Samuel Cooper, "The symptoms of syphilis in the new born child, or soon after birth, are mostly a universal desquamation of the cuticle, which peels off very extensively and freely—copper-colored blotches and scaly eruptions, over a considerable part of the body—various rednesses and superficial ulcerations about the anus and nates, and sometimes about the parts of generation—also ulcerations and fissures at the corners of the mouth, and in the mucous membrane of the fauces, and sometimes on the eyelids. Besides these symptoms, there is frequently an obstruction of the nostrils with a thick yellow secretion, so that the child cannot breathe freely, and the respiration is attended with a snuffling noise. There is also an extraordinary degree of emaciation, the infant continuing to lose flesh daily, and if not speedily relieved, it soon perishes."§

In Evanson and Maunsell's excellent work, on the Diseases of Children, the symptoms and course of the disease, are very concisely and clearly detailed as follows: "The first distinct symptom usually is the occurrence of a peculiar mode of breathing through the nose, known by nurses as the *snuffles.* At the commencement, this is attributed to cold, and seldom attended to, until the eruption appears,—in the interim, however, the child's health is much affected, and without any apparent reason. It has no bowel complaint, and is not undergoing dentition, but yet wastes away, and is feverish, fretful and pallid. In about a fortnight, an eruption comes out rather suddenly, at first upon the lower extremities and buttocks, and subsequently upon the face and body. The practitioner seldom sees the child until this eruption has been for some time in existence, and has changed from its original characters. It appears, however, first in the form of copper-colored blotches about the size of a split pea, and slightly raised above the level of the skin; these are, in a degree, moist upon the surface, and in situations exposed to the air, they soon become scaly, and subsequently are converted into dark-yellowish scabs. Where portions of the skin are naturally in contact, as between the buttocks, in the wrinkles of the neck, &c., scabs are not formed,—but raised condylomatous sores. As the disease advances, the skin, in the interspaces between the scabs, becomes throughout of a copper color; and perpendicular fissures are formed in the lips, giving the mouth a very peculiar and characteristic appearance, which cannot be verbally described; but to those familiar with the disease, is in itself diagnostic of its real nature. The voice at this time becomes feeble and stridulous,—the inside of the mouth often covered with aphthæ—extreme emaciation attends—and if medical aid be not afforded, the child is reduced to a state of excessive debility, and dies, covered with disgusting scabs and ulcerations."

---

* Ranking, No. 5, p. 219.

† Ranking, No. 5, p. 219.

‡ Cooper's Surg. Dict., Part 2, p. 438.

§ Cooper's Surgery, vol. I., p. 540.

Dr. Golding Bird, remarks, "There is seldom any real difficulty in the diagnosis of these cases, when once the practitioner has learned to recognise them. The characteristic *snuffling*, will often enable him to recognise the existence of disease, even before he has confirmed his opinion, by visual examination. The puckered mouth, the position of the very characteristic eruption round the lips and anus, in addition to the peculiar varnished and fissued appearance of the parts from which the scales have faded, will seldom if ever fail to convert a suspicion of the true nature of the disease into positive certainty. Condylomatous excrescences from the margin of the anus, have never in any of the cases accompanied the earliest development of the syphilitic affection, but were always secondary, being observed in those children only, whose primary affection was neglected, or incompletely eradicated. When the eruption occurring on the nates and face in the first few weeks of life, had been promptly treated, no condylomata appeared on the anal margin, at least so long as the children were kept in sight. But on the contrary, when the eruptions were neglected, condylomata were the almost certain results."*

According to Dr. Egan, "The symptoms commonly present at birth are, desquamation of the cuticle, a senile expression of countenance, and rarely a few eruptive blotches; with these symptoms, the history of the case is necessary to form a diagnosis. But when a child is born apparently healthy, the diagnosis is clear, on the supervention of a peculiar train of symptoms. The characteristic *snuffling*, the puckered mouth, the position of the eruption round the lips and anus, in addition to the peculiar varnished and fissured appearance of the parts from which the scales have faded, will seldom fail to convert a suspicion into positive certainty." "These, however, are not the only symptoms of syphilis with which new-born infants are frequently affected. Professor Dubois gives a case, in which an infant at birth had a pustular eruption in full suppuration,—the tibia of the left leg was necrozed, and there was abscess in the thyroid body."*

---

* Braithwaite, No. 11, p. 175.

I have thus presented you with the ordinary symptoms of infantile syphilis, whether developed at birth, or at the expiration of a brief period subsequently;—and having selected the best descriptive definitions of its characters and progress, as furnished by the above writers on the disease, I preferred to present them in their own clear and expressive language, to any attempt at an original arrangement of them on my part.

It was the opinion of the late Dr. Hunter, and others—and the French physicians engaged in hospital practice incline to the same belief,—that intractable purulent ophthalmia in infants is very commonly due to a venereal taint. (See Underwood on Children, p. 316.) And Dr. Jacob informs us that syphilitic inflammation of the eye in infants, "is sometimes, although rarely, met with as in adults, unaccompanied by any other form of the disease." Dr. J. then proceeds with a description of this form of inflammation, and afterwards observes that "he sees these cases oftener after the mischief has been done and the organ destroyed than during the commencement of the attack; yet, even at this period, the emaciation, or defect of nutrition, arrested growth, and pallid dingy skin, proclaim the nature of the malady; and sometimes other forms of it may still be detected."†

Rayer observes, that "Purulent syphilitic ophthalmia is often associated with venereal eruptions, among new-born infants."‡

Cazenave and Schedel, in their work on Diseases of the Skin, offer the following observations on the subject of Ecthyma Syphiliticum, "This is the most common form of the syphilitic pustular eruption, and the one which usually occurs in new-born children. Here the pustules are broad, superficial, flat, of an oval shape, and in great numbers; the scabs are dark and thick, and conceal small ulcers underneath. The countenance of the patient, presents at the same time, a peculiar appearance, which it is difficult to describe; the skin is of an earthy hue—the child is emaciated, the face is drawn in, and marked like that of an old person, by numerous wrinkles, while the whole body exhales a most disagreeable odor."

CAUSES.

Syphilis in the infant, is ascribable to previous infection, communicated from the mother or nurse. When hereditarily transmitted, the child becomes infected, in one of the two following ways. 1st. By contamination during fœtal existence; or, 2d. In the passage of the child during delivery, the mother being at the time affected with the primary symptoms. It has indeed been questioned by some, whether the disease is ever actually communicated in this latter method—but as I find it asserted that syphilis is sometimes propagated in this manner, and as such an event seems to me at least possible, I have presumed to introduce it here, among the causes of this disease. Waiving, however, any attempt of mine to defend and illustrate this position, I must beg you to be patient with me, while I endeavor to prove clearly to you the fact of the hereditary propagation of syphilis, and show *how* the fœtus becomes contaminated during uterine life.

---

* Ranking, Vol. II., No. 2, p. 237. † Ibid., p. 246.

‡ Rayer on the Skin, p. 304.

Congenital syphilis occurs when either the father or mother have been known to be suffering at the time of conception, either the primary or secondary symptoms of syphilis ;—it has also followed, when one of the parties, previously in perfect health, has contracted the disease, and by sexual intercourse, both parents have become infected, the mother having advanced to the third month of pregnancy. It has resulted also, not unfrequently, in instances where one or both parents have contracted syphilis several months or years previous to marriage, the disease was at the time supposed to be cured, and was never afterwards re-contracted. Having now stated these leading, and well-founded points in reference to the subject at issue, let us examine the reasonings and facts which support these conclusions, and determine their soundness and accuracy.

Rayer observes, that "A mother laboring under syphilis, may communicate it to her child in utero."*

Says Dr. Francis, in his revised edition of Denman's Midwifery, "I have had under my own care, six cases of the venereal disease, communicated to the fœtus in utero—two of these cases occurred where the genital system appeared in a perfectly sound state—in another there were ulcers of the labia, and constitutional disease."

At a meeting of the Medico-Chirurgical Society of London, Dr. Snow related the following case : "Another patient had three very healthy children, which were still living ; and after the birth of these, the husband contracted syphilis. He and his wife had the disease in the secondary form, and the treatment for this was scarcely concluded, when the wife became pregnant again. The child was stillborn at the full period, and there was effusion of blood into the serous cavities, particularly in the peritoneum." "Mr. Lloyd and Mr. Wade stated that cases of abortion, and of the death of the fœtus shortly after birth, were more common when the disease affected the father, than when the mother was the subject of the complaint. Why it was so, it was difficult to explain.'†

I have stated that the child may become infected in instances where the mother has never been exposed to the disease, until a period subsequent to conception. The following case is furnished in illustration, by Dr. Porter : "In July, 1-40, a married gentleman, the father of several healthy children, whilst on business in London, unfortunately had intercourse with a servant girl, at one of the hotels, and contracted a sore on the penis, which was pronounced not to be venereal, and healed by topical applications. He returned in August, and in the latter end of September, consulted me for sore throat. It was of that description, which I am accustomed to describe as resembling the mark of a snail-track on the part, and I unhesitatingly pronounced it to be syphilitic. He appeared greatly distressed, acknowledged his transgression, but still seemed to lean with some hope on the opinion of the gentleman who had first seen and treated the case. and refused to take mercury, which indeed, I was unwilling to press, as I understood his wife was far gone in pregnancy. In January, 1841, he came to me in great fright, requesting me to see his wife, whom he feared he had disordered. I found her with several spots of button-scurvy, and gave my opinion to the husband, that they had a syphilitic origin. Still he was unwilling to believe in a calamity which he dreaded beyond anything in the world, and had a surgeon of eminence in consultation, who decided at once that it was button-scurvy and not venereal, and appeared to be greatly strengthened in the opinion by the fact of the lady never having had a previous symptom of any description. In the course of a few days, however, the question was settled by the birth of a child, who died within a week, of unmistakable confirmed lues. *Now this infant had been begotten in April, three months before the father's first contraction of the ailment*, and must have therefore been poisoned by the circulation of the mother at a considerable period subsequently. The question is, how did that circulation become contaminated, seeing that the father had never a sore, capable of furnishing a drop of matter, and the mother never a symptom of any description, until the doubtful one of button-scurvy, which only appeared a few days before her confinement?" Dr. Porter adds, "I might produce many, very many cases of this description. but none so convincing, none so trustworthy as this. The gentleman was sensible and strong-minded; he confessed all to his wife, and both parties were subjected to a course of mercury, and recovered. The case is altogether, in my mind, above suspicion; and it would only detract from its effectiveness, if I related others, less authoritative."*

---

* Rayer, p. 301.

† Ranking, Vol. II., No. 2, p. 237.

It is the opinion of Dr. Campbell, of Edinburgh, "that syphilis, imperfectly eradicated from the system of the father, may so infect the offspring while in utero, as to cause its death; or, if born alive, it may have evidences of disease at or some time after birth." Dr. C. then proceeds to substantiate his views by the narration of well-marked cases in point.†

"Dr. Colles states it to be a well authenticated fact, that a man apparently cured of syphilis, and marrying a female of unblemished character, will get a child which shall be born with the venereal disease, although neither of the parents may exhibit a single trace of the disease themselves during the whole period of utero-gestation; and further, that two or three children may be born to these parents in due succession, and still the father and mother remain to all appearance untainted."‡

---

* Ranking, No. 5, p. 90.

† Braithwaite, No. 10, p. 148.

‡ Braithwaite, No. 15, p. 251.

Dr. Rusker states that he has met "with two examples in children, of hereditary lues, where the formerly syphilitic father, who for a long time had had no symptoms of the disease, produced two children with evident symptoms of the inherited disease, notwithstanding the mother was strong and perfectly healthy, and had never perceived any trace of the disease, either before, during, or after pregnancy."*

But it is needless to cite farther authority in proof of the hereditary transmission of syphilis; the whole matter is settled in the minds of nearly every medical observer. And though Ricord and Acton may not quite agree with us in every particular, we are none the less satisfied of the undoubted correctness of the positions which we have undertaken to assert and illustrate.

But how do these same authorities attempt to explain the manner in which the fœtus is contaminated with the virus of syphilis, in cases where the father has alone suffered from the disease, the mother having never exhibited the slightest trace of syphilis in either of its forms?

Dr. Porter, from whom I have already quoted, says, that cases of hereditary syphilis, which have occurred in his own experience, have "led him to the conclusion, *that the semen of a diseased man deposited in the vagina of a healthy woman, by being absorbed may contaminate that woman, without the necessary occurrence of a chancre, or any open sore, secreting matter, on either the man or woman.*"†

To the same purport, remarks Dr. Rusker, with respect to similar examples of the disease in his own practice,—"These cases prove that the '*seed*' of a father affected with lues, can communicate the disease to the child, without the mother being affected."‡

Another writer very *justly* expresses himself in still more explicit language with reference to this subject.—"It cannot be contrary to our established principles of physiology to believe that a male parent, who has had syphilis at some former period, and whose constitution, although no primary symptoms any longer exist, is not cleared of the effects of the poison, may communicate to the female parent a syphilitic taint, that is, a morbid condition of constitution, similar to that under which he himself labors; which communication is effected by the absorption of the seminal fluid, in which the morbific power exists, by the mother's system, and the subsequent corruption of her own constitution, without of necessity any primary or secondary symptoms having been induced in her."§

This closes our investigations respecting the communication of syphilis to the fœtus in utero; and we will now turn our attention for a moment to the consideration of the asserted origin of this disease in the infant, from an infected nurse.

It has been maintained by some, that syphilis is communicable to the infant by the milk. We are told by Mr. Ancell, that "most writers, including Swediaur, denied that syphilis is communicated to the child by the nurse's milk. But Mr. Lane and Mr. Parker enumerate this as one of the modes of contamination; even M. Ricord has admitted it; and the case above quoted from Mr. Price, are confirmatory of this view. For obvious physiological reasons, the occurrence must however be very rare."* The case referred to, as related by Mr. Price, is a strong and decisive one, and furnishes ample proof on this point; but we cannot stay to copy it, as we have already *extracted* so extensively.

---

* Braithwaite, No. 12, p. 217.

† Ranking, No. 5, p. 90.

‡ Braithwaite, No. 12, p. 217.

§ Ibid. No. 10, p. 151.

Dyckman, in his work on the pathology of the human fluids, "contends that an infected nurse, by lactation, may communicate lues venerea."†

Rayer observes, "It is generally thought now, that the nurse laboring under a syphilitic affection of the genital organs, does not transmit the disease by giving suck, if there be no specific disease of the nipples; others, however, he adds, are of a different opinion."‡

That infants contract syphilis from infected nurses whose nipples are affected with syphilitic ulceration, is certainly true, and has been verified in too many instances to admit of cavil. Says Ricord, "we may be certain that the nurse has infected the child, if she has ulcers in the fauces. pustules on the body, or exostoses, and the child, simply ulcerations of the mouth, nose or anus."§

Rayer remarks, that "the child may be infected after birth, by a nurse who has at the time syphilitic ulceration of the nipples, or by its mother under the same circumstances, if the disease of the nipples have been derived from a strange child, but we are not told, curiously enough, that no instance is known of a child, diseased in the manner just specified, infecting its own mother, although it will readily transmit the syphilitic disorder to a strange nurse."||

Dr. Maunsell says, "Transmission by the nipple of the nurse, we have frequently observed, and have known a whole family to be infected in this way, the nurse having first received the disease from the mouth of a syphilitic nursling."¶

Swediaur remarks, "In all cases of the kind which have come to my knowledge, either the nipples of the nurse were infected by syphilitic ulcers in the mouth of the child, or reciprocally, the nipples of the nurse being affected with ulcers, occasioned ulcers of the same kind in the mouth, nose and lips of the child, and thus communicated to it a general infection."**

TREATMENT.

With respect to the treatment of infantile syphilis, the entire medical profession are united in the opinion that the employment of mercury in some form is essential for its cure; but while most practitioners prefer administering it directly to the child, there are some who insist on its use solely to the mother or nurse.

---

* Ranking, Vol. II., No. 2, p. 237.

† Cooper's Surg. Dict., Part 2d., p. 462.

‡ Rayer, p. 289.

§ Ricord, p. 51.

|| Rayer, p. 301.

¶ Evanson and Maunsell, p. 351.

** Braithwaite, No. 13, p. 284.

This latter method is recommended by Rayer, who says, "When a mother suckles her child, and both are affected with the venereal disease, it is sufficient to subject the mother to antisyphilitic treatment, the curative effects of this being transmitted by the milk of the mother to the child, and rendering it unnecessary that the child should be treated directly. This well-demonstrated fact," he continues, "has induced several practitioners to treat children who are weaned or suckled by artificial means, by feeding them with the milk of a goat or an ass which has been subjected to mercurial inunction.'*

Says Mr. Castle, in his Manual of Surgery, "In these cases, you give the mother a quantity of mercury. the influence of which is communicated to the child through the medium of the milk, and it becomes cured of the syphilitic disease."†

Mr. Gibert, in his practical treatise on diseases of the skin, offers the following suggestions on the management of syphilis in the new-born infant. "If the child be at the breast, the nurse is made at the same time to take corrosive sublimate internally, as in the subjoined pills, ℞—Ext. aconiti, grs. xij., Pulv. opii, grs. ij , Bichl. hydrargyri, grs. ij. M. and divide into eight pills, one to be taken each morning." The infant is also subjected to the following local application, "Opiate cerate, ℥j., Ammoniacal oxychloride of mercury, ʒj., to make an ointment. Care is taken at the same time to prescribe emollient baths, and to see that the infant is properly cleansed."‡

There are, unquestionably, certain cases which require that one or both parents, or the nurse, should be brought under the full and continued action of mercury ; as, for instance, when both parents have become infected or the female alone has had the disease, or in case the child is suckling an infected nurse. But unless the mother, in case she is suckling the child, or the nurse, is laboring under actual syphilitic symptoms, she should not undergo a mercurial course, at least "until the child is weaned, as by affecting her general health, it would be likely to deteriorate her qualities as a nurse."

There are two methods in which mercury is employed directly to the infant, viz., internally and by inunction.

The following are the remarks of Sir Benj. Brodie, on the treatment of syphilis in infants. He says, "I have tried various methods of treating these cases. I have given the gray powder internally to the child, or some kind of mercury to the nurse. But the mercury given to the infant gripes and purges severely, that given to the nurse cannot be depended upon, and at all events is an unjustifiable practice. The mode in which I have treated these cases for some time past, is this : I have a flannel roller provided, at one end of which I spread some mercurial ointment, say a drachm or more, and I apply the roller thus prepared not very tightly round the knee, repeating the application daily. The motion of the child produces the necessary friction, and the cuticle being thin, the mercury easily enters the system. This causes neither griping nor purging, it does not even cause soreness of the gums, but it cures the disease. Very few children ultimately recover, in whom the mercury is given internally, but I have not seen a single case in which this other method of treatment has failed."*

---

* Rayer, p. 313.
† Ranking, Vol. I. No. 1, p. 83.
‡ Ibid. p. 298.

At a meeting of the Medico-Chirurgical Society, Dr. Snow stated the following case: "One patient, whose husband had suffered from syphilis before marriage, had had five children born about the end of the eighth month. Of these, only the last was living. and it had been treated as soon as it was born with mercurial ointment to the knee, in the way recommended by Sir B. Brodie."†

In the treatment of the purulent ophthalmia of infants. Underwood observes, "that whenever a venereal taint actually exists, it is more safely treated by unction than in any other way, and infants would probably be cured much oftener than they are, if recurrence were had to it in better time than it commonly is."‡

Though the superior efficacy of the treatment by mercurial inunction is asserted and sanctioned by such high authorities, and by others no less eminent in the profession, we are nevertheless disinclined to adopt such a course, in preference to the more general method of employing mercury, *internally*—still as we cannot speak from actual experience. with reference to the comparative merits of these two modes of treatment, it is sufficient for our present purpose to sketch their relative efficiency and success, without any farther attempt on our part, to bias your judgment in favor of either of them.

Dr. Rusker states: "Regarding the treatment, I have attempted to cure the disease of the *suckling*, by giving mercury to the mother, so as to affect the milk, but without success. The cure was effected however, by giving calomel to the children for some time."§

Mr. Samuel Cooper says: "We find that the disease readily yields to calomel, in half-grain doses, or to five grains of the hydrargyrum cum creta. The latter, as the milder preparation, is, perhaps, the better medicine of the two; it hardly ever fails "||

Dr. Strange has detailed a well-marked case of the disease, which he treated as follows: "The child took hydrarg. cum creta for about two months, with an interval, and ultimately recovered, and is now well. To the mother, about 18 grains of blue mass were given as an alterative."¶

Another case is also reported by Dr. Egan, in which the child took two grains of the hydrarg. cum creta three times in the 24 hours, and in one month appeared to be restored to perfect health.**

"In the treatment of congenital syphilis, marked by copper colored blotches over various parts of the body, Dr. Golding Bird found that two grains of hydrarg. cum creta, continued for a fortnight or so, by which time the eruption has usually faded very much. and then the administration of Iodid. potassii, gr. j. in ʒij. Syr. sarzæ, ter

---

[*] Ranking, Vol. II. No. 2, p. 167.
[†] Ibid. Vol. II. No. 2, p. 237.
[‡] Underwood on Children, p. 316.
[§] Braithwaite, No. 12, p. 217.
[||] Cooper's Surgery, p. 540.
[¶] Braithwaite, No. 10, p. 150.
[**] Braithwaite, No. 13, p. 285.

in die, will soon effect a cure. Dr. Bird remarks that syphilitic eruptions are exceedingly frequent among the infants of the lower classes, and that the simple treatment just mentioned is very effective in their cure. There are few affections among children the treatment of which is more satisfactory, than that of syphilitic eruptions—indeed they frequently seem to fatten upon their medicine. If the mercury cause diarrhœa it is sufficient to suspend its use for a time."*

In "Evanson and Maunsell on Children," Dr. Maunsell gives us the following directions in the treatment of this disease. "Our plan of treating a child is, to administer from one to two grains of hydrarg cum creta, two or three times a day. (according to the age,) until the eruption and snuffles disappear. The child usually fattens under this treatment—and salivation is never produced, at least we have never seen it in a child under three years of age. Should the mercury affect the bowels, which sometimes happens, we must combine with each dose, from half a grain to a grain of Dover's powder, or the powder of chalk and opium. The time required for treatment is from six weeks to two or three months, and the medicine should always be continued for two or three weeks after every symptom has disappeared; even when this precaution has been observed, the disease may return, and the mercurial treatment must be again and again resumed. The sores about the anus and other similar situations, will often be benefitted by the application of black wash, or of dilute citrine ointment, and when they become very indolent it may be necessary, towards the termination of the treatment, to stimulate them with nitrate of silver or sulphate of copper."†

Dr. Bulkley, in his edition of Cazenave and Schedel on the Skin, observes in a note, "In infantile syphilis, I am in the habit of giving to the child, small doses of hydrarg. cum creta, or calomel with chalk, sometimes combined with minute portions of Dover's powder, and having the warm bath used freely. The nurse must be put under appropriate constitutional treatment at the same time.‡

This completes our review of the treatment of syphilis in infants.

I have but a single apology to offer, for trespassing upon your patience, and consuming so much of the valuable time which we spend here this evening, in the presentation of the paper which has been just read. It is this: the subject is one of extreme interest, and one with which it is of the highest importance we should all be thoroughly acquainted. Never yet having met with a full treatise on the disease, and desirous to investigate it for my own information, I have thought proper to preserve the results of my investigations as in the above paper, and as I have done this evening, give you the full benefit of my labors. I am satisfied that I have thus, though in a very hasty and imperfect manner, contributed my quota toward supplying a *deficiency* which I must believe you have all regretted equally with myself.

---

* Braithwaite No. 11, p. 176. † Ibid. p. 354. ‡ Ibid. p. 312.

PART SECOND.

CRITICAL ANALYSIS.

ART. VII.—*Lectures on the Theory and Practice of Physic.* By JOHN BELL, M. D., Member of the American Med. Association, and of the Med. Soc. of the State of Pensylvania; Fellow of the College of Physicians of Philadelphia; Member of the American Philosophical Society, and of the Georgofili Society of Florence, &c., &c. And by WILLIAM STOKES, M. D., Lecturer at the Medical School, Park-street, Dublin; Physician to the Meath Hospital, &c., &c. Fourth edition, revised and enlarged. Philadelphia: Ed. Barrington & Geo. D. Haswell. 1848. 2 vols. 8vo., pp. 784—976.

IN the January number of the Journal for 1845, the third edition of this valuable work was noticed, and we are much pleased to see that the opinion then expressed of its additional value has been fully recognized by the profession. The unwearied exertions of Dr. Bell to render this work fully adapted to the wants and exigencies of the profession, are clearly to be seen on a perusal of the additions made to the present edition. The amount of matter already furnished by Dr. B. amounts to "upwards of fourteen hundred pages," making the volumes to embrace a complete course of practical medicine. The present edition has been thoroughly revised; many of the subjects have been recast; others have been introduced for the first time, and in the departments relating to pathological anatomy, diagnosis and prognosis, the recent discoveries and conclusions drawn from investigations made in organic chemistry and by means of the microscope have been introduced. "Although," to use his own words in the preface, "it must be confessed, that as yet these important matters are not so closely blended with therapeutics as to form a homogeneous mass;" he considers, however, that a notice of them is due to medical science. And in following out this consideration, he has borne in mind the necessity of not allowing them to encroach upon the large space necessarily devoted to clinical medicine. Dr. Bell claims not to have been backward in adducing his own experience on all portions of the work when he deemed it necessary, and yet he lays no claims to originality; he has "been intent on exhibiting material facts and deducing what he believes to be legitimate consequences, he has drawn freely from all available sources of information, without seeking to merge the enviable character of honest historian in that of chief actor." With these preliminary remarks, presuming that our readers are acquainted with one or more of the previous editions of the work before us, or at least with the review mentioned above, we will now introduce to their notice some of the more important additions found in the present.

The first subject in the order of the work which has met with any extensive alteration, is that of *Epidemic Cholera;* six lectures, comprising seventy-two pages, are devoted to its consideration. It will be contrary to the design of the present notice to enter into a lengthy review of this subject. Owing however to the recent appearances, and as some have prophesied, of a probable return of this dreadful scourge to our own country, we cannot forbear giving our readers a partial statement at least of our author's views. Lecture thirty-ninth of the series commences with an historical account of its rise and progress, taken principally from the report made by the College of Physicians of Philadelphia to the Board of Health, drawn up by the author and Dr. Condie. Lecture forty is devoted to considerations of its causes and apparent connection with other diseases, and closes by an attempt at the solution of the question, "*Is cholera contagious?*" He cites the opinions of various writers *pro* and *con* on this subject. The view entertained of its contagious character by Drs. Copland, Watson, Graves, and in our own country, by Dr. Dickson, is referred to, and notwithstanding the eminent array of talent as well as reported facts which he presents as favoring the doctrine of its contagious nature, Dr. Bell expresses his decided "disbelief in the contagiousness of cholera."

The symptoms of epidemic cholera as spoken of in lecture forty-one, our author classes in four divisions: 1. *Diarrhœal*, or *Cholerine.* 2. *Confirmed Cholera.* 3. *Collapse.* 4. *Reaction* or *Consecutive Fever.* We deem it not necessary to enter into the symptoms which, according to Dr. B., denote the different stages of the disease, as given above, but pass on to lecture forty-second, which treats of the *Prognosis, Post-mortem Appearances* and *Laws of Recoveries and Mortality of Cholera.* The subject of Prognosis has received no new additions. The same may be said of the description of the post-mortem appearances, under the head of "*Changes in the Fluids in Cholera,*" the researches of Dr. Foy, at Warsaw; MM. Rose and Wittflok, at Berlin; Dr. O'Shaughnessy, at London; MM. Lecanu and Rayer, at Paris, are drawn upon. Dr. Bell considers that "certain physical and chemical changes of the blood are in a great measure peculiar to epidemic cholera." The most striking of these are its blackness, which has a shining appearance, and when spread upon a white surface, resembles in color the darkest cherry. It fills the right side of the heart and the great veins, and is found of the same character in the left cavities and in the large arteries. It is less serous than common, and when exposed to air, does not become reddened as soon as healthy blood. The ramifying capillaries of the membranes are filled, "and blood can be drawn almost as readily from a vein after death as before." Dr. Bell closes by saying that—

> The chief changes, therefore, in this fluid, during an attack of the disease, is in its serum, by the escape of its water and saline ingredients, particularly the alkaline carbonates. There is also notable diminution in the quantity of fibrin. The proportion of albumen, on the other hand, is greatly increased: Dr. O'Shaughnessy found that there were 133 in the place of 78 parts, the healthy standard in 1000 parts. The blood-corpuscles fall below the average. Urea was detected in the serum of the blood of some cholera patients who had secreted very little urine for several days. Urea has also been found in the bile of cholera subjects.
>
> The fluid ejected from the bowels was found to contain carbonate, acetate, muriate, phosphate and sulphate of soda, coagulable lymph, or a compound of albumen and fibrin, some mucus and water. The sediment in the evacuations in cholera is composed, according to Dr. Bohn of Berlin, of fragments of the epithelium of the mucous membrane of the intestines.

The laws of mortality and recovery in this disease are next taken up. The conclusions of Mr. Farr, published in 1837, by the Roman Board of Health, are given, accompanied by a series of tables constructed from a registry of 9372 cases kept by this gentleman. The facts deduced from the tables given, says Dr. B., "prove that in cholera, the probability is generally not in favor of death; they also establish the importance of early treatment, for half the deaths happen in the first twenty-four hours." The treatment of this affection occupies two lectures, viz. xliii. and xliv.; and the classification laid down while speaking of the symptoms is observed. Upon this subject various and diversified have been the opinions of medical observers. The deductions drawn from statistics furnish at present but little assistance, owing to their contradictory character and the want of uniformity in their classification; as an instance of this we may refer to the period of collapse and the different ideas conveyed by its use by different writers. Again but little is known of the natural history of the disease and the bearings or influence of peculiarities of constitutions upon the per cent. of mortality. We lack important data on these points and the obscurity which surrounds the therapeutics of this affection will continue until these are furnished.

The treatment recommended in its different stages, may be briefly stated as follows: In the first stage, or that of cholerine, as it has been termed, "the treatment should be precisely identical with that in common diarrhœa, when we are very desirous of shortening its duration." The excessive nausea may be relieved by the use of a few drops of tinct. camphor or cajeput oil on a lump of sugar. In the value of the first, Dr. B. has great confidence. If the symptoms continue after the evacuation of the bowels by medicine, "the safer practice will be to draw blood from the arm to the extent of ten or twelve ounces." Dr Bell also favors the administration of ipecacuanha, "the good effects of which extend beyond the mere removal of irritating substances from the stomach."

For ourselves, we have long since been led to believe that the use of bloodletting, except in cases of strong arterial excitement—or the use of cathartics, except in cases when *strong* reasons lead us to entertain the opinion of the presence of fecula or scybala in the intestines, is not admissible, and should not, as a general rule, be resorted to. Dr. B., it appears, is fully aware "that exceptions have been taken to purgatives in the formative stage of cholera"—that hypercatharsis, vomiting, and even death itself has followed their exhibition. Still, he believes, that "in a majority of cases a mild purgative, given under the precautions already laid down, is fully adequate, in the formative stage, to prevent the coming on of regularly formed cholera.

When the second stage, or that of confirmed cholera, has set in, and there is an absence of bile in the matters discharged—extremities cold and clammy, pulse small, respiration laborious, eyes suffused, Dr. B. says, that he "can testify from personal observations to the good effects of an emetic of twenty grains of ipecacuanha;" he has also found the Russian vomit, composed of two table-spoonfuls of salt to a half-pint of water, of great service when other remedies failed. Simultaneous with the administration of the emetic, an enema of salt in warm water should be resorted to. Should moderate re-action follow, we may rest satisfied as spectators. *Blood-letting* should only be resorted to when the patient is of a sanguineous habit, and complains of pain in the abdomen, headache, or vertigo, with accelerated pulse; or when vomiting and purging is severe and accompanied with much epigastric weight, or if heat and pain be present, leeches may be conjoined. "A remedy akin to blood-letting, in its tranquillizing effects in cholera, is *calomel.*" Often has he witnessed its eminently curative impressions, first on the nervous and sensitive surface of the digestive mucous membrane, and, secondarily and by sympathy, on the respiratory and genito-urinary ones. It should, however, be administered after blood-letting, in cases which require it, or in others after the administration of an emetic. Its use ought to be restricted to the first and second stages of cholera; "it may sometimes be called for in the fourth stage, or that of re-action, with fever."

Opium.—Dr. B. deprecates the indiscriminate use of this article. It is one to which the attention of the physician is generally first directed, and one from which, *a priori*, we should expect the most beneficial results. In regard to its use he says:

> When we are sure that no errors in regimen have been committed, and that no irritating ingesta or imperfectly-digested matters are lodged in the alimentary canal; and when we have to deal with a nervous subject of a thin and spare habit, and in whom fear has had its full share in bringing on the attack, we not only are free but bound to prescribe opium very early in the disease, and to repeat its administration at short intervals, but in moderate doses, beginning with a grain or its equivalent in laudanum, and continuing in doses of half a grain every hour, until the desired effect is observed or its failure is obvious.
>
> As a general rule, it will be proper to wait until the stomach is relieved by an emetic, and the bowels by saline or even simple aqueous enemata; or, in the cases justifying the practice, until inflammatory congestion has been abated by venesection or cupping,—before we administer opium, at least with the freedom and frequency that would imply our mainly relying on it. If

the indication in the mind of a physician be to procure a discharge of bile, recourse to opium will be withheld yet a while longer until calomel has been administered, or until this latter shall be given in combination with it.

Throughout the course of the observations of Dr. Bell on this disease, it is plain to be seen that he believes in "the congestive character of cholera, and of its analogy to malignant intermittent fever," in order to meet the therapeutical indications which grow out of such pathological views, he believes that

> Quinine ought to be had recourse to, and administered in full doses at short intervals, in the disease now under consideration, in the manner which has been found to be so eminently serviceable, in the recognized malignant or pernicious intermittent and remittent—the congestive fever of the southern and western portions of the United States. But, if satisfied of the propriety of the use of quinine, we shall not wait for a subjection of the cholera symptoms, as practised by Dr. Jephson, but give it, either from the very beginning of the disease, or at the latest, after an emetic or venesection. As in the instance of the disease to which we suppose cholera to be analogous, we may give the quinine in combination with calomel or with opium, according to the additional indication which we propose to fulfil,—as, for example, emulging the gall-duct by calomel, or relieving the atrocious spasms by opium. Our confidence in this remedy will depend, in a considerable degree, on the locality in which the cholera prevails, and the predisposition of the patient to attacks of periodical fever, as well as the extent of prostration and want of re-active power at the time.

The novelty of these views claim from the southern portion of the profession a careful consideration. We do not, however, believe them in unison with the character of the disease as it appears in northern climates.

External stimulants.—He believes in the "superior efficacy of dry frictions in a uniform manner, sedulously continued, by a mixed movement of pressing and grasping the skin and muscles beneath, especially of the limbs and back." In regard to the use of drinks, the taste of the patient may be safely consulted; care, however, should be observed, not to allow them more than a mouthful at a time.

Lecture xliv. is occupied in the description and treatment of the stages of collapse and re-action—or choleric fever. A good resumé of the opinions of different writers is here presented; but he adduces no new point from his own experience.

Three lectures are devoted to cholera infantum.—These lectures have been entirely recast; and Dr. B. claims to have "placed upon a surer basis than before the pathology of this affection." He discards the hepatic origin of the disease, and asserts the "identity of follicular gastro-enteritis with cholera infantum."

As early as 1812, Dr. James Jackson, of Boston, published a paper in the New-England Journal of Medicine and Surgery, vol. 1st, page 12, entitled, *Some Remarks on Morbid Effects of Dentition, more particularly with reference to the Diseases of Teething Children in Summer and Autumn.* The dissections from which the pathological deductions of Dr. J. were drawn, were made by Dr. J. C. Warren and himself. The results of their combined dissections show that "the mucous membrane of the stomach, together with that portion of the small intestines most immediately connected with the stomach, has been found affected with inflammation. It is to this that the peculiar phenomena of cholera infantum may be traced." From a careful perusal of this paper, however, it does not appear that Dr. J. located the change in the mucous follicles of the small intestines, or for a moment entertained the idea that in these latter was primarily seated the true pathological change of this disease. To Dr. W. E. Horner belongs the credit of first demonstrating by careful dissections, the existence of "clusters of muciparous glands or follicles of the small intestines, very distinct to the naked eye, and with their orifices enlarged and tumid, and often studded with minute ulcerations." A full account of Dr. H.'s dissections and views may be found in his *Treatise on Pathological Anatomy.* In the New-York Medical Gazette for 1841, Vol. 1st, Nos. 18 and 19, Dr. W. C. Roberts has given an elaborate analysis of the writings of American practitioners on this disease. Dr. R. has most certainly set forth in a clear light, the views of Dr. Horner in regard to the follicular origin of the disease, although he does not commit himself to a clear expression of his own opinions in relation to the character of the softening of the mucous membrane of the stomach and intestines, which accompanies it. Certain it is, however, that the labor of Dr. R. has done much to divest the minds of medical men at the present time of the hepatic origin of cholera infantum, and at the same time directing their attention to the views which Dr. Bell in the main now holds. Of the correctness of Dr. Horner's views, Dr. B. is fully convinced, as will be seen from the following passage :—

> A morbid state of the follicular apparatus of the intestinal canal being shown to be the chief organic cause of cholera, at least of the more urgent symptoms of vomiting and purging, with fever, it remains for us to ascertain the circumstances under which these glandular bodies have become thus morbidly developed and ulcerated; or, in other words, why they should become specially the seat of irritation and inflammation at this time.

These views, he thinks, are farther strengthened by a recurrence to a law of physiology, which embraces the fact that "there is a very great increase of growth, and organic functional activity of the follicles of the whole digestive system, keeping pace with that of the lymphatic glands, commencing at the period of first dentition—from eight months to two years from birth." This accounts for—as Billard has stated in his work on infants—the great readiness of follicular inflammation in the mouth, or follicular stomatitis *(aphthæ)*, and of follicular gastro-enteritis and entro-colitis in children from the eighth month to the first few years from birth. "The causes which more especially affect this division of the follicular system are, irritating ingesta acting primarily on the digestive mucous membrane itself, and atmospheric heat acting secondarily on it through the skin and pulmonary mucous membrane."

> If this view be admitted, we have a ready explanation of the occurrence of cholera infantum in children at a particular age; that in which the digestive follicles are most notably developed, and most susceptible to new impressions; and also that in which this susceptibility is liable to be injuriously acted on by

the irritation of teething. But the physiological predisposition may and does often pass away, if the process of dentition be easy; and it requires the operation of another cause to generate open and violent disease. This cause is found in high heat; and we see now why there must be coincidence of a particular age or of a predisposition with a particular exciting cause or even causes. Follicular development and susceptibility, teething and high atmospherical heat, can only be brought into conjoint action to the production of diseases within a limited period: it is that in which cholera infantum takes place.

From the foregoing observations, which we believe clearly set forth the views of Dr Bell, the reader will readily see how completely they agree with those of Dr. Hallowell, as contained in his paper published in the last No. of this Journal, which we copied from the American Journal of Medical Science for July, 1847. How far these views place the pathology of this disease upon a surer basis than before, we leave the reader to judge. The therapeutic indications growing out of them are, in the first stage, to remove gastro-intestinal irritation, whether functional or organic, which latter depends on follicular enteritis, associated not unfrequently with erythemoid inflammation of the mucous membrane of the intestines, and occasionally of the stomach. In the second stage, when the diarrhœa is fully developed, we have to bear in mind the probability of softening of the mucous membrane taking place, or that the follicular disease is in a stage of ulceration, or on the decline. With regard to treatment, nothing new is given, and such being the case, we do not feel disposed to enter into an analysis of it, but pass on to a notice of the additions made to the *Diseases of the Urinary Organs.* Upon perusal, we find nothing very important added to the pathology or therapeutics of this department until we come to that portion which treats of urinary deposits; here the views of Drs. Prout and Bird are freely drawn upon, but as Dr. Bell's only endeavor is to present a careful analysis of their views, we must refer the reader to the work itself. We are not a little surprised that the subject of *Bright's disease* or granular degeneration of the kidney, a disease of great importance in a pathological point of view, should be so lightly passed over. Although, since the last edition of the work, numerous important additions have been made to our knowledge of the pathological anatomy of this disease by the researches of Toynbee, Johnson and Gairdner, still no reference whatever is made to them. For one, we should have been very much gratified to have discovered the workings of the same masterly pen here as was evinced while treating of cholera infantum.

The addition made to the diseases of the female organs of generation are in a measure more satisfactory. In Lecture lxxiii. the subject of leucorrhœa is treated of, from which we gather the following.

The division of leucorrhœa into acute and chronic is the most natural, and for its treatment the most useful. *Acute metro-vaginitis* and *chronic metro-vaginitis.* The former seldom lasts longer than from six to ten days, both forms are of more frequent occurrence in variable climates, in which cold and moisture prevail, and during spring and autumn, than in warm regions and seasons.

> Thus it has been observed that the disease is more common in the north than in the south of France. Residence in a city constitutes a strong predisposing if not exciting cause. There are instances of females, so soon as they begin to reside in a city, after having lived in the country, becoming leucorrhœal. Low and damp localities, and houses recently built, or from other causes not properly dry, have a similar effect.
>
> There are not wanting examples of the epidemic prevalence of leucorrhœa, especially when spring and autumn are colder and more moist than usual.

Of the impropriety of the use of the term leucorrhœa to designate a disease, when it is in fact merely a symptom of an organic change or lesion, Dr. Bell comments upon with great justness, and thinks that it is as little applicable as any other that could be given on the strength of an occasional physical character of the discharge. Speaking of its causes, he says :

> The most frequent organic lesion giving rise leucorrhœa in adult females, who have had sexual intercourse, is that of the *os* and *cervix uteri*, which are sometimes simply engorged, in others inflamed, and in many more exhibit a granular surface with ulceration. Of fifty-nine cases observed or referred to by Dr. Roberts. in his valuable paper on leucorrhœa, (*New-York Journal of Medicine*,) thirty-three were accompanied by ulcerations, and in forty the discharge was seen to issue from the *os tincæ.* Similar are the results of M. Marc d'Espine's observations, soon to be noticed under the head of diagnosis.
>
> Dr. James Henry Bennet, in the opening of his " *Practical Treatise on Inflammation, Ulceration and Induration of the Neck of the Uterus*," remarks : " With reference to leucorrhœa, indeed, I have ascertained, to my complete satisfaction, firstly, that, setting aside cancerous disease, in the very great majority of adult females, who have been exposed to sexual intercourse, a confirmed leucorrhœal discharge, whatever may be its nature, is accompanied by inflammation of the neck of the uterus ; secondly, that this inflammation seldom exists long without producing ulceration ; and, thirdly, that ulceration is *always* accompanied by more or less engorgement (swelling with or without induration) of the substance of the uterine neck."

The treatment proposed consists, in the acute form, of the use of leeches to the labia, cups to the loins and sacrum, and " to administer the salines and antimonials, alternating with two or three doses of calomel." And for topical applications, sponging of the genital organs and groins with moderately warm water, and the use of tepid injections into the vagina. In the chronic form, the use of blue mass with aloes, in order to act freely upon the bowels, after which, in order to secure their regular action, the rhubarb and soap pill may be directed. The frequent use of cold water by means of the sponge to the loins, sacrum, perineum and inguinal region, he has found of great service, and in hysteric females, the use of the warm bath at the temperature of 94° on every second day. Great care should be observed in the use of injections. Simple warm water will frequently be found sufficient ; when the disease has been of some standing, the health feeble and the vagina relaxed, and the discharge simply mucous, astringent injections, consisting of decoction of rhatany or solution of alum, may be used; if they fail, nitrate of silver of from three grains to half a drachm to the ounce of water, may be used; he has, occasionally, found a solution of chloride of soda or lime of great advantage. Internally, balsam copaiva, cubebs and iodine; he has been much pleased with the iodide of potassium and also the tincture of iodine. The preparations of iodine prove the most useful in cases of purely uterine leucorrhœa.

The next is a very interesting lecture on *Ulcerous or Granular Metritis*, made up in part of selections from the late work of Dr. Bennet. Dr. Bell believes its "etiology and symptoms are nearly identical with those of chronic metritis in general," unconnected with a syphilitic taint. In speaking of the treatment, he says,

> Inflammation of the mucous membrane of the cervix is so soon followed by ulceration, that you will seldom be called on to treat the first alone; and, on the other hand, the ulceration being the result of inflammation, you must bear in mind the double indication, in directing your remedies. Hence, small bleedings, in the manner heretofore advised for chronic metritis, rest, posture, mild vaginal injections and laxative enemata, will, in subjects of a sanguine temperament, or whose circulation is unduly excited, and in whom there is much sanguineous congestion of the cervix, precede the use of the more strictly topical, which in this disease constitutes the most important part of the treatment.
>
> When the period of inflammation has passed, or when this latter has taken a more indolent course, astringent injections, such as solutions of alum, and sulphate of zinc, infusion of oak-bark, rhatany, Peruvian bark, galls, &c., are to be administered. The sugar of lead, commonly mentioned with astringents, is in fact sedative, and is adapted to irritable and painful states of the neck with ulceration when the former would be inadmissible.
>
> In general, however, these remedies will fail us in granular ulcerations of the *cervix uteri;* and we are constrained to apply caustic, of some kind or another, directly to the part affected. This is done through a speculum; different physicians and surgeons extolling different ways of cauterization. The simplest and the most efficacious is the nitrate of silver in its solid state, with which, brought to a point, the ulcerated surface should be lightly and quickly pencilled, after you have carefully wiped off with lint any adhering mucus or other secretions. Some prefer using the nitrate in solution, and applying this latter by means of a fine brush. Emollient or slightly astringent injections, three or four times a-day, will be used after cauterization; and if there be any constitutional re-action approaching to fever, a purgative or two may, also, be administered.
>
> An examination of the parts after a week or ten days, will, generally, show a subsidence of inflammation and an approach to, if not a complete, cicatrization of the ulcers. One application will, however, seldom suffice; and after an interval of eight or ten days, it will be well to repeat it. With suitable precautions, in regard to posture and the use of a proper instrument, the solution of nitrate of silver may be injected *per vaginam*, so as to be applied almost directly to the *cervix* and *os tincæ*. For this purpose, the patient ought to recline on the side of a bed or a lounging chair, with the pelvis elevated in such a way as to make the vagina an inclined plane, of which the cervix is the lowest part. When it is desired to apply the fluid to the uterus and not to the vagina, the terminal bulb of the projecting tube of the syringe should be carried in, so as to be felt at the cervix or mouth of the womb, and then withdrawn half an inch, before the contents of the portion are thrown against the diseased surface. If there should be vaginal heat and pain afterwards, a solution of common salt will soon neutralize any remains of the solution of the nitrate which has not combined with the animal tissue.

The acid nitrate of mercury is a fluid caustic, to which many of the French practitioners are partial. It is a solution of deuto-nitrate of mercury in nitric acid. It is too powerful a remedy in slight ulcerations; and when it is used, a longer period ought to elapse before a repetition than in the case of the nitrate of silver. The proportions laid down by Dr. Bennett, in his valuable treatise, are, of eight days' interval for the acid nitrate of mercury, and four for the nitrate of silver.

Lecture lxxvi. is occupied by the consideration of *Tumors of the Uterus.* In the general description and classification, he has drawn freely upon the valuable work of Vogel, and in the particular description and treatment, upon that of Ashwell. It may be looked upon as an excellent compilation, from which the reader will, in a condensed view, obtain all the more essential points relating to a general knowledge of them.

The next subject which claims our attention, in the order of the work, is that of croup, or as Dr. B. terms it, *Laryngitis Membranacea.* In treating of the morbid anatomy of this affection, he expresses the belief that the inflammation is primarily seated in the *Larynx.* It will be well for the reader to observe this, for upon this fact a very important therapeutic indication depends—one which we are sorry to see our author has but passingly noticed in delineating the treatment. We quote his own remarks:

> The anatomical peculiarity which distinguishes croup from other varieties of laryngitis, is the production, primarily in the larynx, of a false membrane. This production is secreted from the mucous or lining membrane of the larynx; it consists of albumen with a proportion of phosphate of lime and carbonate of soda; and occasionally fibrine. It is corrugated and hardened by diluted sulphuric. nitric, and hydrochloric acids; and, on the other hand, rendered softer and diffluent by concentrated acetic acid, liquid ammonia, alkaline solutions and a strong solution of the nitrate of potassa. A microscopic examination shows it to be about a line thick and of a slight consistence: it is composed almost entirely of ordinary pus-globules, mixed with inflammation corpuscles, and a species of cell double the size of the pus-globule, but otherwise similar to it. Regarding this false membrane or lymphatic exudation as a product of inflammation, we should naturally expect to see the surface from which it is given out evince this morbid state. Accordingly, the mucous membrane itself is often found to be rough, red, and thickened; but at other times one is not a little surprised to find it unchanged in these particulars. It is no forced supposition, however, that the inflammation may be so far relieved by this pseudo-membranous secretion that there would be diminished redness, which, as in many other cases of greatly-increased vascularity during life, disappear entirely by death. The same explanation will apply to those cases in which there is neither false membrane nor increased redness observable after death, although there had been unequivocal symptoms of croup before this termination. Even when we speak of this new product as the anatomical character of croup, we must at the same time admit that it is not always present: it should rather be regarded as one of the chief proofs of an inflammation of the mucous membrane of the larynx, which may still be checked early; and thus the lymph will not be given out with sufficient freedom to form the membrane. Sometimes, in place of this latter lining entirely the cavity of the larynx, we find patches and shreds, and at times merely thickened mucus.
>
> But, farther observation shows, that the morbid action in croup, is not long confined to, although it commonly begins at, the mucous membrane of the larynx. The trachea and bronchiæ are soon implicated, and to such a degree

as to be lined with this membranous exudation now continuous with that of the larynx; and the bronchiæ are filled with a tenacious mucus.

The treatment which he proposes is that generally laid down by most systematic writers; he insists upon the early adoption of a thorough antiphlogistic course—and before entering upon its local treatment, bespeaks the attention of the reader to some remarks on the therapeutic action and curative powers of tartar-emetic and calomel as remedies in croup; he thinks they are not regarded in all their therapeutical bearings as they ought to be, and is fully persuaded that the views he entertains of their physiological and therapeutic action fully harmonize with the pathology of the disease. We offer no apology for quoting the following remarks on this subject, although lengthy.

Not infrequently the relief from an attack of croup will be as permanent as it was speedy, by means of vomiting and its accompanying effects; and no other remedy after an emetic will be required for the solution of the paroxysm. I would lay stress on the words "accompanying effects," which I have just used; for it seems to me that they are overlooked by not a few practitioners, who think that the simple act of vomiting is itself the prime and sole means of detaching and expelling the morbid accumulations in the air-passages; and that the chief mischief from the disease consists in the mechanical obstruction of these passages. With such persons the selection of an emetic is a matter of comparative indifference, provided they can cause their patients to vomit. But a very slight retrospect of the pathology of croup must convince us, that, from the outset, our remedies should be selected with reference to their power of abating morbid arterial and secretory action, not only in the larynx and trachea but in all the bronchial ramifications; and, also, of causing sedation of the vessels of the lungs proper as well as those of the brain. The effects produced by an emetic should harmonize with, and in degree be a substitute for, those caused by the next remedy, to which, if the paroxysm persists, we must immediately have recourse. This next remedy is venesection.

Now, we know of no emetic substance which is comparable in these respects with tartar emetic. It diminishes the excitement of the heart and arteries, is a sedative also to the capillary tissue, checks morbid secretion, itself dependent on capillary excitement, and allays spasm—effects these manifested after vomiting, but which often precede this latter and are independent of it. The mere act of vomiting is an evidence, rather than a cause, of relaxation: it will serve to eject mucosities and albuminous shreds and membranous exudations from the larynx and trachea; but there must have been an antecedent state of diminished excitement and turgescence of the mucous membrance and its withdrawal from the adherent plastic lymph, before this latter can be readily detached and new formations prevented. It is true that certain substances, by a peculiar irritation of the gastric nerves, will call the muscular parietes of the stomach and the diaphragm and abdominal muscles into combined action, and give rise to vomiting; but their effect is confined merely to evacuating the contents of the organ; and if their dose have been large, they cause continued straining efforts to vomit, with, at the same time, little or no increased secretion from the tracheo-bronchial vessels and mucous follicles; but rather an accumulation or temporary congestion of the thoracic and cranial cavities. Such emetics as these, sulphate of copper, for instance, may produce continued expulsive motions; but their sedative effect on the mucous membrane of the air-passages being slight, or none at all, they fail to arrest its morbid secretion, or to produce a separation of that which is already formed. The notion, that the mere act of vomiting will separate, to any notable extent, adherent false membrane, or that the mere scraping off of membrane and glairy mucus will give much relief to a croupy patient, the mucous tissue of whose larynx and trachea is inflamed, is too purely mechanical.

Our object, then, being to abate and speedily remove the morbid excitement manifested by abnormal secretion, and the turgescence and injection of the mucous membrane of the air-passages, and particularly of the upper portion, we shall have recourse at once to the agent best calculated to attain this end. Some writers recommend us to use, in the precursory or forming stage of croup, ipecacuanha wine or syrup of squills, and to reserve the tartar emetic for the inflammatory stage. Dr. Cheyne, who advises an emetic in the inflammatory stage, but without specifying the substance to be used, lays great stress on the peculiar advantages to be derived from the administration of tartar emetic in the suppurative stage. Having myself seen so repeatedly the failure of attempts to arrest the forming stage of croup by the domestic prescriptions of ipecacuanha wine or even by the compound syrup of squills, I uniformly prescribe at once a solution in water of tartar emetic, proportioning the dose to the exigency of the case, that is, to the probable duration and degree of inflammation. By this means, the disease is either at once prevented from maturing, or we acquire a measure of its violence and an index to a speedy recourse to the lancet. In a majority of cases of even distinctly-formed croup, tartar emetic will be found adequate to stop the paroxysm, by removing the peculiar cough, restoring the voice to its natural tone, and giving ease to the respiration; while, at the same time, it procures the discharge of mucus, and, it may be, of albuminous shreds and portions of false membrane. The little patient in a state of languor hardly unpleasant, induced by the operation of the tartar emetic in the manner already described, now goes to sleep; and the anxious mother is in a great measure relieved from her solicitude for the remainder of the night.

Not only in the incipient stage, but in the milder forms of actual croup, are other substances preferred by some practitioners to tartar emetic; on account of the prostrating effects of the latter. Were our diagnosis so certain that we could ascertain positively the precise degree and duration of the changes in the mucous membrane, from its first increase of natural secretion to the exudation of plastic lymph, and the congestion and thickening of the membrane itself, a graduation of medicines at this time might be attempted; but as this is not in our power, and as we know that, from the first coming on of hoarseness and cough, precursory of croup, there is a tendency to increase of excitement and phlogosis of the passages, the safe practice seems to me to be that which shall prevent these probable and often dangerous and fatal results, even though it be at the expense of momentary strength, and with the tax of temporary prostration. I believe, therefore, that the early use of tartar emetic is not only the safer but the milder practice, as it will most probably prevent unpleasant consequences, and save the necessity of recourse to harsher and complex measures which would be called for, if medicines of less power had been used in the beginning of the disease. I have met with but one case in which alarming prostration was caused by a persistence in full doses of tartar emetic, after the violence of the paroxysm of croup had been subdued by the medicine. The mother mistook my direction, to give the solution conditionally, that is, if the symptoms returned after my departure, for a positive injunction; and the result was a sinking of the vital powers, and *deliquium* of my patient; from which state, however, I soon succeeded in restoring her by active frictions, sinapism to the epigastrium, and laudanum and ammonia internally. It will often be proper, if, after free emesis, there be much straining to vomit without corresponding discharge, to give a drop or two of laudanum to the little patient, and to allow it to sleep, for which it will be sufficiently prone, for a while.

You must by this time be fully aware of the therapeutical basis on which I rest my use of tartar emetic in croup, as well as in so many other of the phlegmasiæ. It is not merely as an emetic, but as a contra-stimulant or sedative, and opposed to inflammatory action irrespective of its procuring evacuations, that I habitually use this medicine. Its utility in this way is beginning to be perceived by some of the practitioners of Great Britain, one of whom, Dr. Wilson, of Kelso, relates his successful use of tartar emetic in croup; he having cured ten out of twelve cases. He gave, after leeches had been applied to the larynx, followed by warm poultices frequently renewed, the antimonial salt, in doses of one-fourth to one-third of a grain, at first every hour, until a decided impression was made, and afterwards every two hours, till the patient was considered in safety. The toleration of the medicine did not extend so far as that it did not vomit at first quite freely; but it had no action on the bowels which required castor oil or some other laxative to obviate costiveness. For children, Dr. Wilson properly directs from half a minim to a minim of laudanum in addition to the tartar emetic.

With these opinions, and the ground on which they rest respecting the operation of tartar emetic, you may readily suppose that I put no faith in blue vitriol (sulphate of copper). Its astringency following emesis is not a property which we want at this time.

It is not a little vexatious to find writers of established and deserved reputation take such limited views of the effects of *calomel* in various diseases. One will tell us, that unless it purges it will do little good; another assures us, that its administration will be useless in this stage of croup, because time is not allowed for it to touch the mouth. This last notion, that we cannot procure the full revolutionizing and alterative effects of mercurial preparations in general, unless the salivary glands are inflamed and incipient ptyalism caused, is rank empiricism, and has completely blinded us to their therapeutical operation. Calomel, which we may speak of as in a great measure representing the other preparations of mercury, when taken into the stomach acts very speedily on the mucous membrane of this organ and of the small intestines; and, in a short time, on the liver and pancreas, which, by means of their excretory ducts, are placed in close and continuous relation with the intestinal mucous surface. Soon the large intestines are affected, and increased defæcation is the consequence. But the operation of the medicine, even in purgative doses, is not confined to the gastro-intestinal canal and its subsidiary glands: it is extended to all the other mucous surfaces—the respiratory in one direction and the genito-urinary and its secretory apparatus in another; and is followed by increased expectoration and diuresis, together with an abatement of prior irritation which may have prevailed in one or other of these divisions. Calomel acts in a more especial manner on all portions of the mucous system, and through it on their glandular appendages; and hence its use is more immediately applicable to irritations and inflammations of the mucous membranes and their glands than to other forms of disease. Most mischievous has proved the notion that the general system is not affected by mercury, and notably calomel, unless and until ptyalism is produced. Under the influence of this error, immense quantities of the medicine are introduced into the stomach, with the effect often of a great depression of the vital powers, and particularly of the functions of the nervous system, cold skin, excessive inertia, &c.; the prescribing physician all the while waiting for the action of the calomel. In this way the patient may be actually destroyed by mercury, without any suspicion being entertained of the fact by the expectants for salivation.

The topical remedies mentioned by our author, consist in the use of blisters, stimulating liniments and ammoniacal cerate, composed of simple cerate ℥j., carbonate of ammonia ℥j., to be thoroughly mixed, and two drachms to be applied to the throat, after which it is to be covered with a bag of hot ashes—he also mentions the use of the solid nitrate to the fauces and pharynx, and says: "In primary and common croup, while we do not forget cauterization, we should be aware that it must not divert our attention from the more active and heroic remedies before mentioned." It will be remembered while we were speaking of the laryngeal seat of croup, we mentioned that a very important therapeutic indication was based upon it; the only allusion made by Dr. B. which bears in the least upon it, is contained in the passing notice of the application of the nitrate of silver to the fauces and pharynx as stated above. It is a little surprising that Dr. B. should pass by the several cases reported, within the last year in our home journals, where a solution, varying from forty to sixty grains of the nitrate to the ounce of water was applied to the glottis and larynx, and which proved signally successful in all. It is this to which we alluded in our previous remarks, (for a full notice of its use, &c., we refer the reader to the article in the last number of the Journal, page 91.) For ourselves we perceive no valid objection to the treatment, and as the value of the nitrate in controlling the progress of acute inflammation of the skin and the mucous membrane of the mouth and fauces is fully admitted, we see no reasonable objection to its extended application to the treatment of croup—the possibility of its application to the larynx having some time since been fully proved.

In looking over that portion of his remarks which relate to the treatment of chronic laryngitis, we observe the following. We copy it as a matter relating to the history of the treatment of the disease in this country, our opinion having been previously expressed in relation to this matter in Vol. VII. page 109, of this Journal, to which we beg leave to refer the reader. Dr. Bell says:

> As discussions have been held in the medical and newspaper press on the subject of topical applications to the larynx in the treatment of chronic diseases of this organ, involving a question of priority of practice, which has been claimed by or for Dr. Horace Green of New-York, I shall mention a few facts relating to my own reading and experience in the matter. Dr. Green's volume—A Treatise on Diseases of the Air-Passages, &c., appeared in 1846. My first knowledge of the work of MM. Trousseau and Belloc was derived from an analytical review of it in the *Edinburgh Medical and Surgical Journal*, for October, 1837. Taking this review as a basis, I wrote an article headed "*Laryngeal Phthisis—Consumption of the Throat—Clergyman's Sore Throat*," which was published in my *Eclectic Journal of Medicine* for December, 1837. On that occasion the means of applying caustic solutions to the larynx were described according to the directions of Trousseau and Belloc, as given in the Edinburgh Journal and derived primarily from their work. It is very evident, therefore, that apart from the knowledge of the practice obtainable from the work itself of these gentlemen which was published in Paris in 1837, tolerably full publicity must have been secured to this knowledge in Great Britain through the Edinburgh Journal, and in the United States through the Eclectic Journal, before the expiration of the year 1837. The work itself was translated by Dr. Warder, of Cincinnati, and published in "Dunglison's American Library," in the year 1839. So much for the first announcement and subsequent diffusion of the process of the French writers. I have next to add a few words on the priority of the practice in this country according to the process recommended. It would seem, as far as I can learn, that mine was the first published statement of the process recommended by Trousseau and Belloc having been carried into effect in the treatment of chronic laryngitis. It was made not formally as a matter of boast but explanatory, in these words, which occur in Lecture xii. of the additions which I made to Dr. Stokes's Lectures on the Practice of Physic, p. 668, and published in 1840.

> "I have used, as more convenient, a piece of sponge sewed carefully to the end of a small-sized gum-elastic catheter with the rod in, and the end of which has the required curve given to it, so as to allow of a ready application to the opening of the larynx and borders of the epiglottis." My first trials of the practice were in 1839, and from that time to the present I have repeated it at intervals and always with benefit.
>
> As regards the extent to which the sponge moistened with caustic can be carried down into the larynx, this must be a matter of opinion. When the instrument as we may call it, is used at all it is carried downwards and pressed on the glottis: some, with Dr. Green, may insist that it finds its way into the larynx, others, and the majority, believe that it stops at the rimæ glottidis, and that the fluid alone which is squeezed out of the sponge passes this part. The difference of opinion by the former does not constitute any valid claim for discovery.

The opinion of Dr. Bell as to the extent to which the sponge, moistened with caustic, can be carried down into the larynx, we are compelled to differ from. He says, that this "must be a matter of opinion, and that when it is used at all, it is carried downwards and pressed upon the glottis." There is no necessity of its being a matter of opinion—it is a matter of fact, and as such, is as capable of demonstration as any fact in the universe. For ourselves, we are satisfied that the passage of a piece of sponge, as directed by Dr. G., completely into, and even through the larynx, is feasible; we have done it often, and feel satisfied that any one understanding the anatomy and physiology of the parts, after acquiring a little tact, can pass the instrument into the larynx as readily as a bougie into the urethra. Does not Baron Larrey mention the case of a soldier, who received a gun-shot wound of the epiglottis, and in which he could introduce a gum elastic catheter into the larynx, and frequently the fact was only discoverable when fluid was introduced through it;* and does not this case prove clearly the possibility of the operation?

Phthisis Pulmonalis.—Six lectures, occupying about seventy-five pages are devoted to the consideration of this disease; many useful additions have been made to its pathology. The natural history of tubercle is thoroughly discussed; the works of Vogel, and Hasse, and the essays of Wright and Bennet, are freely drawn upon. The influence of climate is ably reviewed; and the symptomatology, prognosis, and treatment of phthisis may be said to have been brought up to the present state of medical science. In speaking of the benefit to be derived from a change of climate, Dr. B. remarks:

> Whatever good effects are derivable from a change of climate to the phthisical patient, depend on the aid which it gives to nutrition, including, of course, hæmatosis, more than on any directly sanative, or, as some imagine, balsamic influence of the air on the lungs. This truth is beginning to be better understood, now when it is discovered, that warm southern climates are never beneficial unless digestion and healthy nutrition are maintained; and hence, also, we can now understand the seeming paradox, that some phthisical patients are benefited by a change from a warm to a cool, even although it be a somewhat inclement, climate. The general health is often better in the latter, and

---

* Relation Chirurg. de l'Armée d'Orient, p. 286. Also Ryland's Treatise on the Diseases and Injuries of the Larynx and Trachea, p. 240.

the patient's chances of longer life increased, provided local hyperæmia, congestions, and inflammations of the lungs be guarded against. To these the patient is more liable in cold climates ; but, as it has seemed to me, he is, on the other hand, more exposed to tuberculous disease and irritation of the bowels, and consequent impediment to nutrition, in warm climates. When we speak of the latter we mean those in which not only the average temperature of the year is considerable, but also the temperature of the winter months, as in the West Indies, is relatively high. In atonic states of the system, and where the appetite is inconsiderable, digestion slow, and nutrition imperfect, I would recommend residence, even during the winter months, in northern latitudes to that in southern and warm ones,—provided that all due attention be paid to the clothing of the patient, and a uniform temperature of the air indoors through a suite of apartments, if not the whole house, be kept up. Precautions of this nature will not be found incompatible with permission to exercise on foot or in a carriage, whenever the weather is not very inclement. In this opinion I am strengthened by the observation of cases, the treatment of which, I have directed in accordance with it.

That portion of the work which relates to *diseases of the heart*, has also been recast; and to the subject of pericarditis, we observe some very important additions from the writings of Hasse, Latham, and Taylor, have been made. The researches of the first, relative to the pathological anatomy of the serous coverings of the heart, are here clearly given. Want of space compels us to pass by these valuable additions. We know of no treatise to which we can so readily refer the reader for a full and clear description of the symptoms, pathological appearances, progress, and terminations, prognosis, diagnosis, causes, and treatment of this disease, than to the two lectures here devoted to its consideration.

Several other subjects, viz.: *Meningitis*, its different forms; the *Exanthemata*, and *Fevers*, have also been recast. But we must pass by these, in order to consider more fully than we could otherwise do, those which have been for the first time introduced into the present edition of these lectures by Dr. Bell. And first in the order of the work, is *Diseases of the Blood-vessels*. All the morbid changes which the blood-vessels undergo, are not here considered. but "those only which bear directly on pathology, in connection with medicine, leaving the surgical relations of them, to those within whose province they come." The most important, most practical and frequent diseased change to which the blood-vessels is liable, is that of inflammation and its consequences. Arteritis, by which we understand inflammation of an artery, although not a frequent disease, is still one which, looked upon in a pathological point of view, and as relating to its consequences, demands of the practical physician a serious and close attention. Until within a few years past, but little was known of its natural history ; but since the valuable researches of P. Frank, many valuable experiments, and not a little attention has been given to it. In vindication of this, may be cited the experiments of MM. Trousseau, Pigot and Sasse; as also the practical work of Hasse. This disease is "generally coincident with, or consecutive upon the inflammation of other organs, and is sometimes a sequence of the recession of exanthematous or rheumatic affections. In regard to its extent, it may be divided into *general* and *partial*—the former according to Hasse, is an exceedingly rare affection.

Our author in speaking of the *anatomical characters* of this disease, says,

> The red color seen on opening the arteries is, for the most part, a cadaveric imbibition, and varies in its intensity, from a delicate rose hue to a scarlet and even claret color, penetrating through the inner or serous coat. It is most common in the dependent parts in the proximity to inflamed organs, and wherever, in fine, the blood most abounds. Even in parts of the vessels which are empty, the redness occasionally met with may have been caused by blood which had been carried onwards by movements imparted to the body, or by the disengagement of gas. Inflammatory redness does not, it is now well ascertained, differ from the redness resulting from cadaveric imbibition. To have any diagnostic value, it must be accompanied by other changes in the tissues, such as thickening or brittleness, or a rough or villous appearance of the internal membrane, which adheres, at the same time, more or less closely to a fibrinous clot. Coagulation of blood in the vessel is, in fact, one of the effects resulting from vascular inflammation; but we must not look for it with any uniformity. The most certain anatomical sign of phlogosis of an artery is a pseudo-membranous albuminous exudation on the inner surface of the vessel, which may even be so great as to obstruct the caliber of the smaller vessels. This exudation may take place, also, between the coats of the vessel, and particularly in the cellular sheath. It is difficult, some writers say impossible, to detect the exuded matter in inflamed arteries, because it is carried away with the stream of blood; and it has been suggested that, carried on to the capillary system, it induces changes in it, or if it get beyond this, it will effect a coagulation of the blood at some ulterior point. In some cases, changes of this nature have been observed.

The symptoms of arteritis, are acute pain felt along the course of the vessel, which beats with increased force. If it be superficial, the artery forms a kind of cord, sometimes knotted, tense and very painful on pressure. If the vessels should be obstructed by exudation or by coagulation of the blood, symptoms of an interrupted circulation setin, there is numbness, coldness of the parts to which the arteries lead, and even gangrene may come on. Should a collateral circulation take place by anastomosis above and below the seat of the disease, slight atrophy may present itself. Dr. B. remarks :

> *Aortitis* we may suppose to be productive of symptoms of an alarming and formidable character ; but the diagnosis is still imperfect. The inflammation is generally confined to the arch, and to the thoracic and abdominal portion. Intense heat, as of a raging fire in the chest and abdomen, coinciding with a small and weak pulse, or, according to some, great beating of the aorta, and dull and deep-seated pain in the course of the vessel, and finally, lipothymia, have been enumerated as symptoms of this disease. To these we must add, according to M. Bizot, the rapid supervention of œdema. When we meet with anasarca, unconnected with disease of the heart, the pericardium, and the kidneys, we may suspect inflammation of the aorta, with the production of false membranes, and concretions of blood. To the violent pulsations of the aorta, which M. Bouillaud regards as so significant, small value should be attached. We meet with these quite frequently in hypochondriacal. and in hysterical subjects. Dr. Corrigan thought that he could trace angina pectoris to inflammation of the aorta, but as we have seen, there is no fixed organic lesion connected with this disease, to which it can be said to be related as an effect. It is in aortitis more particularly that we meet with phlegmonous abscesses, studding the vessel in its length.

Secondary symptoms, which play so decided a part in phlebitis, are very seldom observed to follow arteritis. The only secondary affection of proportionate frequency in this disease is what has been termed *spontaneous gangrene*, long known by the term of senile gangrene, a name now obsolete, in consequence of its having been satisfactorily proved that the malady may affect any age, not excepting childhood. Ossification of the arteries is not the proximate, but rather the accidental, remote cause of spontaneous gangrene.

The treatment must consist in active antiphlogistic measures and posture. Should there be much fever, *free* and *repeated* bleeding should be resorted to. After which, emollient cataplasms and inunction with mercurials, may be used. Purgatives and other antiphlogistic remedies should follow the abstraction of blood.

Formation of semi-cartilaginous patches and of atheromatous deposits upon and between the arterial membranes. These two changes, says Dr. B., are for the most part associated with each other. They are of frequent occurrence, and the former occur throughout the whole of the arterial system. They probably form a semi-fluid, almost gelatinous substance of a pale yellowish or reddish color, forming a layer of more or less extent upon the inner surface of the artery. It is most abundant in the small arteries, less so in the aorta. Frequent observations have established the progressive transition, from the gelatinous layer to the semi-cartilaginous patch, proving almost beyond a doubt, the development of the latter from the former. These patches undergo but little change. They never ossify, as Andral and others have affirmed.

Atheroma is deposited by a different process. This substance originates between the internal or serous, and the middle or elastic membranes; sometimes between the fibres of the latter. In its ulterior change it destroys first the middle and then the internal membrane, leading, eventually, to the so-called ossification of the arteries. The incipient signs of this morbid process are cognisable in small, more or less sharply-defined, roundish patches, of the same yellowish white color as the artery, only of a more decided hue. The mass generated between the internal and middle coats, softens and increases in quantity, occasioning gibbous prominences on the free surface of the arteries. The morbid product is found in every degree of consistence, from that of a boiled white of egg to that of pus,—its appearance being, however, generally that of thick peas porridge. Bizot has often detected it in shining particles, like gold-dust, and Cruveilhier like cholesterine scales of certain gall-ducts. These masses, examined by Gluge under the microscope, have been recognised to be congeries of fat-globules. With the progress of softening of the morbid product there is a softening and liquefaction of the middle membrane, and subsequently, a cracking, and, ultimately, destruction, also, of the internal membrane, leaving the external tunic, and what may remain of the middle, to hold and transmit the blood.

The substance deposited between the internal and middle membranes may, however, undergo, instead of softening, the opposite process, namely, that termed ossification. It is not uncommon, indeed, for a vessel to exhibit, in different parts, the two processes of softening and ossification. The latter mostly assumes the form of thin and very brittle layers of a pale yellow color. The internal membrane passes over them unchanged; sometimes, however, it disappears, so that the stream of blood comes into immediate contact with the bony plate. This enlarges at the expense of the middle membrane, whose fibres become compressed, more and more attenuated, dried, and atrophic; or else soften and waste away, owing to a semi-fluid atheromatous mass deposited beneath the ossification. The bony scales, although in general adherent to the arterial membranes, sometimes crack and tear at the centre, favoring an ulcerous disposition of the parts, and projecting, in their partially-loosened state, into the cavity of the vessels. Valentin has shown, from microscopical examination, that the so-called ossifications differ essentially from true bony substance. He terms them calcareous deposits. In rare instances, the atheromatous mass is reduced by absorption, and the ulcers heal. Atheromatous deposits occur in the small vessels as well as in the larger: but the several types of the disease, hitherto described, are found chiefly in the posterior surface of the aorta, and the ulcers, almost exclusively, in the abdominal aorta.

A remarkable observation has been made by Bizot, viz., of the *symmetrical* occurrence of arterial disease as an absolute law. Thus, the same morbid changes are wont to develop themselves in the corresponding arteries of both halves of the body at the same point, and in equal degree and extent.

Sex appears to exert but little, but *age* a decided influence upon this affection. As this deposit " is most frequent in the smaller arteries of the leg, brain and heart, we are prepared to see, with the increase of the disease, an obstruction of the canals, gangrene of the lower extremities, certain forms of cerebral softening, and atrophy of the substance of the heart."

Aneurism of the Aorta being one of the most interesting in a medical point of view, receives from our author a notice. The diagnosis of its diseased state are doubly valuable to the physician; " first, by enabling him to ascertain the presence of a formidable malady, and thus to direct remedial measures, which, though they be of a negative character, may prolong life; and secondly, by preventing needless, if not hurtful therapeia, under a notion of the morbid phenomena being the result of an affection of some other part—the lungs, heart, digestive organs, and even the brain." A very interesting paper entitled "*Researches on the Symptoms and Diagnosis of the Diseases of the Aorta*, by George Green, M. D., edited by Dr. Gordon, was published in the Dublin Quarterly Journal of Medical Sciences, for July, 1846, from which Dr. B. gives a very extended and careful analysis, and fearing that the reader may not have read it in detail, we quote our author's review.

We may mention in advance that the most frequent seat of aneurism of the aorta is in the thoracic portion and in the aorta ascendens near the arch. That of the abdominal portion is usually near the cœliac branch. It cannot be denied that many aortic aneurisms, though of considerable size, remain latent, as far as symptoms are concerned, until at the very moment of rupture and sudden extinction of life.

In proceeding to a review of the symptoms, we begin with some external appearances. In aneurism of the arch, we meet in many instances (eight out of twelve) with a peculiar knotty or congested state of the veins, either of one or both upper extremities, or of the superficial veins of the chest, appearances indicative of pressure on some internal vascular trunk. In some cases the veins were so turgid as to resemble hard cords, and pressure did not obliterate them. The color was in general blue, but in one case it had assumed a darker or purplish hue. Bleeding did not notably diminish the tension of these veins, and the flow of blood from them was not always readily stopped. The stasis of blood has been found to be so great in some cases that its temperature has sensibly diminished, and a separation of the fibrine has taken place during life within the vessels. The movements of the thoracic parietes undergo important modifications in cases of intra-thoracic tumor, as in aneurism of the arch of the aorta. The phenomenon most usually observed is non-expansion of one side of the chest, in ordinary or during forced inspiration; and depends on pressure on the corresponding bronchia. When the trachea itself is compressed, and when the sac is large, the upper third of the entire chest exhibits a comparative immobility in the act of respiration, and abdominal respiration is strongly marked during the paroxysms of dyspnœa. A feature of an opposite nature attends the disease, viz., an abnormal movement which, though sometimes very slight, can be discovered very early in the disease. It consists of a diffused expansive motion perceptible under the upper portion of the sternum, or above or below the clavicles: it is sometimes accompanied by a distant shock or impulse. This symptom may be made more evident by making the patient walk for a short time, so as moderately to excite the circulation without rendering the respiration tumultuous; and then when he stands and holds his breath, to run the eye across the infra and supra-clavicular regions, and over the superior portions of the sternum. A forward movement, arising from a force in the interior distinct from that of the heart, is then clearly perceived.

Serous infiltration of one of the upper extremities frequently follows the pressure of aneurismal tumor, and appears after the turgescent state of the veins has existed for some time. The same appearance may exist in both upper extremities, and even in the lower, when the disease has lasted a long time, or when the sac is large, and the constitutional disturbance severe. As anasarca also ensues in valvular disease, the safest general rule is, that in valvular disease partial anasarca is rare, and in aneurism common. Except in the pericardium there are seldom serous effusions into the serous cavities. Coma from effusion into the ventricles of the brain is not uncommon, however, in aneurisms of the arch.

The general *symptoms* are, first, dyspnœa. This exists in greater or less severity, in all the cases. It comes on gradually, is progressively increased, and finally ends in orthopnœa. It is chiefly at night, that the patient is roused from sleep, in all the terrors of impending suffocation. Lying on the back either induces a paroxysm, or increases its violence. Even attempts at deglutition will sometimes bring on a paroxysm. The dyspnœa seems to be independent of atmospherical changes; and in the duration of its attack, does not exceed a period of two hours. A stridulous sound heard during inspiration, occurred in eight of the twelve cases, analyzed by Dr. Greene, sometimes in ordinary but more frequently during forced respiration. The inspiration is prolonged, and the sound generally raucous and deep-toned. The difficulty of breathing is mostly referred to the inferior part of the trachea. Both dyspnœa and stridulous breathing diminish in intensity, after free venesection, or spontaneous hemorrhage, if the patient survive it. The voice was modified in six cases: its general character was that of hoarseness, but it was occasionally shrill, clangose, whispering and interrupted. Dr. Greene never saw aphonia from an aneurism of the arch. The causes of these various modifications of voice, may be arranged under the heads of alteration in the capacity or torsion of the air-tubes, compression or ob iteration of the recurrent nerves, and œdema of the glottis. Cough was present in all the twelve cases, and very similar in character in each, viz., loud, ringing, paroxysmal, and occasionally dry. The paroxysm varies in duration; it is generally long and suffocative. In many cases the cough and dyspnœa appeared simultaneously, and the former remained for a considerable time harsh and dry.

The nature and severity of the pain complained of varied considerably. In most instances, however, it is that kind, which is indicative of irritation of the nerves; and as such, it is lancinating, burning or terrebrating; at times appearing to originate in the centre of the chest, and to radiate towards the circumference, at others, to shoot along the trachea, and neck, or towards the shoulders and upper extremities; in some cases it is accompanied by painful palpitations of the heart, and a sense of constriction about the chest; but not by any prominent acceleration of pulse, or other symptoms of fever. This pain is intermittent, is independent of atmospherical changes, and is much relieved by anodynes, especially belladonna, exhibited both internally and externally. There would appear to be a connection between this pain, and some irritation at the roots of the sensitive nerves of the spinal cord: and this last again may, in some cases at any rate, be referred to erosion of the vertebræ, by pressure of the aneurismal sac. In several of the cases, pain of a decidedly inflammatory character made its appearance, and was accompanied by hardness and acceleration of the pulse, with thirst, and other symptoms of fever, which cupping and bleeding relieved. This was caused by an intercurrent pleurisy, or pneumonia, as was obvious from the stitch complained of in the side, and the existence of crepitus in the lung. In nine out of twelve cases, dysphagia existed, and it may be regarded as one of the concomitant symptoms of aneurism of the arch of the aorta. The dysphagia is subject to variation, being more marked in one day than another; it may also disappear altogether before death.

The phenomena exhibited by the pulse are: 1. Weakness of the pulse is one or both wrists, in comparison with the impulse of the heart; 2. The pulse at the wrist later than the impulse of the heart; 3. Absence of the pulse; 4. Visible pulsation of the radial artery. A strongly-marked visible pulsation in the radial artery was observed by Dr. Greene in his eleventh case, but the aortic orifice was patulous. Dr. Corrigan has shown the value of this symptom in the lesion last named.

The following is the order of frequency of the general symptoms observed in Dr. Greene's cases, viz., dyspnœa and orthopnœa, paroxysmal cough, terebrating pains, dysphagia, modifications in the pulse, and modifications in the voice.

If recourse be had to a study of the physical signs for diagnosis, we discover, on percussion, a dull sound more or less strongly marked under the upper half of the sternum, or at either side of that bone, and the production of pain by this act; on auscultation, a bellows sound is heard over the aneurismal sac, or at the upper third of the sternum, even in cases in which there was no complication of valvular disease of the heart. The interposition of a small portion of the lung, between the sac and the parietes of the chest, will interfere with the results of percussion, particularly if the lung be emphysematous, when an abnormal clear sound will be produced. In cases where the bellows sound was soft, the opening of the sac was smooth and round, and where a rasping sound existed, apparently in the situation of the sac, the valves of the heart were diseased and rigid, and the aorta contained morbid deposits. The common respiratory murmur is lost when the tumor reaches the sternum. The hand placed over this bone receives also the shock of the impulse communicated by the beating of the aneurismal tumor.

The attitude of the patient laboring under aortic aneurism is often peculiar. He is seated in bed or on a chair with his body bent forwards. I have witnessed a case of this kind in which the patient could not take any other posture. It is true that he referred all his agonizing pains, under which he suffered, to his abdomen. After death we found large coagula of blood that had come from ruptures of the thoracic aorta, and found their way down between the crura of the diaphragm into the cavity of the peritoneum, and filled almost the left iliac region. It is worthy of notice, however, that precisely the same symptoms,—attitude and pain, with obstinate constipation, had been experienced by this patient twenty months before. From all these he was relieved by what I deemed an appropriate treatment; but without any suspicion of his having aortic aneurism. The sac was adherent to the ninth and tenth dorsal vertebræ, which were denuded, and in part removed by absorption.

Treatment.—Cures have been spoken of, three cases are reported by MM. Dusal and Legroux. Large and repeated abstractions of blood have been recommended; but as Dr. Hope has remarked, these only tend to increase the rapidity of the circulation and violence of the pulsations. Small and repeated bleedings, conjoined with mild purgatives to act upon the bowels, will be more prudent, while the action of the heart may be still farther kept down, and the tendency towards the formation of coagula increased by the administration of digitalis, or acetate of lead, in doses from two to three grains every few hours, may be given. Dupuytren gave it to the extent of a drachm in the course of the day. Goulard's extract, by means of soft compresses wet, may be kept to the joint when convenient. A restricted regimen, and repose of both body and mind, and a moderate use of the most simple drinks, should be enjoined. Should anæmia develop itself, during treatment, which we must endeavor to keep clear of, owing to the irritable circulation which always accompanies it, an analeptic regimen and the moderate use of chalybeates may be advised.

Heterologous Formations in the Arteries.—No well-authenticated example of this is known. "It is otherwise with the veins, which, though alike exempt from tubercle and atheroma, are obnoxious in various ways to fungous growths."

Phlebitis.—There is probably no subject which so clearly evinces the aid which the study of pathological anatomy has rendered to the science and art of medicine than this. By it many obscure points in the phenomena of disease have been fully elucidated, or at least rendered comprehensible. As instances, we might refer to the so-called malignant intermittents consequent upon injuries and surgical operations, to certain typhoid conditions, puerperal diseases and the like. Hasse remarks, "that the veins, owing probably to their double function as vessels of return and of absorption, as also the protracted sojourn of their contents at any one point, are more prone to inflammation than any other system of vessels." The following description of the anatomical changes in an inflamed vein, which Dr. B. has principally condensed from Hasse's work, we quote:

> The study of phlebitis resolves itself into two heads; the one restricted to the consideration of the purely local, primary phenomena, the other to the general, secondary consequences, diffused throughout the whole system. First, let us observe the *anatomical changes* in an inflamed vein. It is reddened internally and externally; and as the disease gains ground, the parts become irregularly spotted, marbled, occasionally streaked, and, at length, display every variety of shade, from the natural color to a dirty violet, on the one hand, to a deep scarlet, on the other. There is incipient infiltration of a faint-red serous fluid, together with a dense net-work of delicate little vessels. The coat of the vessel is thicker than common: it is rough and unequal; and it is lined by a fibrinous deposit, constituting a false membrane, at first connected with the internal membrane of the vein by means of a tenacious mucus-like substance, which, afterwards, is replaced by adherent cellular tissue. These fibrinous deposits may go on increasing so as to fill up entirely the venous canal. With this formation there ensues a loss of smoothness and polish in the internal membrane, which assumes a dull, velvety, or slightly puckered appearance. The external membrane, at the same time, appears

thickened and turgid, and soon becomes adherent to the cellular tissue, which in its turn has become firmer and paler from the effusion of plastic lymph. Both membranes are now easily torn. In this state of things the vein, when cut asunder, does not collapse, even after the plug of deposited fibrinous matter or coagulated blood has been removed, but remains open like an artery.

If the disease continues, so that suppurative phlebitis has set in, the plug becomes softer, especially towards its middle; it assumes a grayish, yellowish-white, dotted appearance, and finally, exhibits a straw color, and a semi-fluid consistence; and is, finally, resolved into pus, which is usually confined within a fibrinous layer more or less thin, and rarely found loose within the vein. But the contents of the vein being unceasingly propelled towards the heart, the more or less solid products are necessarily conveyed beyond the original site of inflammation. An obstacle to the product of inflammation passing along with the venous current is derived from the tendency of pus when mingling with the blood to cause its coagulation; and hence, the pus becomes isolated by the coagulation of blood, both above and below the place of its formation, and is thus cut off from the remainder of the blood. Cruveilhier calls this the sequestration of veins. The pus, under these circumstances, may be gradually removed by the process of absorption, the vein becoming, in the mean time, obliterated; or it may make for itself an outlet through the parietes of the vein. These abscesses, varying in size and number according to the amount of inflammation, form beneath the skin, or between the muscles, and the patient is thus protected against the dangerous consequences of a general infection of the circulatory fluid. The membranes of the veins are all changed at this time: their color is a grayish-white; they become softened and thickened; are no longer to be distinguished from one another; and they form, in conjunction with the surrounding textures, a nearly uniform membranous layer, of a lardaceous aspect and character.

It is a question still unsettled, whether the pus found in the veins be the result of secretion from the inflamed surfaces, or of direct metamorphosis of the blood itself. Experiments, microscopical examinations, and analogy, have been pressed in favor of each of the two sides of the question; these I shall not repeat here. Gulliver maintains that the puriform fluid in veins contains no pus-globules, but consists merely of liquefied fibrin.

Phlebitis varies in its extent; sometimes extending the whole length of a vein, sometimes only an inch or two inches: it may be even restricted to one side of the vessel.

In speaking of the *progress* and *terminations* of phlebitis, the following, which is also condensed from the same authority, occurs.

Organic changes in the capillary system constitute a most important sequel to phlebitis. These have been designated by the appellations of "lobular inflammations" and "lobular abscesses;" and they are of most frequent occurrence in the lungs and in the liver. Peritonitis is an exception to the little proneness of serous membranes to this puriform effusion.

Pathologists have been divided in opinion as to whether the pus formed in the veins at the part originally inflamed, be substantively transmitted through the medium of the circulating current to the lungs, the liver &c., to accumulate within certain points of the latter; or whether it be actually generated in the parenchyma of these organs. The latter view is now the prevalent one, but in a modified shape, which does not exclude the primary agency of pus formed in an inflamed vein, and serving as a cause of stagnation, and an exciter, as it were, of purulent formations in distant organs. The explanation of what does occur is in this fashion. The pus is conveyed in substance by the veins to the heart, and forwarded thence; but those pus-globules which have reached the capillaries of the lungs in their entire state, are unable, from their size, to permeate the latter organs. These globules now become a central point of stagnation, and finally, of extravasation, in the adjacent branches of the pulmonary artery, and thus determine, eventually, local inflammation and suppuration. In like manner are accounted for, abscesses of the liver, in consequence of inflammation within the tract of the portal system.

The principal physical causes which develop phlebitis proceed from wounds or laceration of veins, frequently from puncture with a rusty or unclean instrument; it not unfrequently occurs after great surgical operations, "and whenever there is extensive suppuration in the neighborhood of veins that remain patulous when opened or wounded."

The symptoms of phlebitis in its formative stage, are much the same as are present in arteritis. Soon, however, œdema proportionate to the interruption of the circulation sets in, afterwards, general uneasiness, headache, want of appetite, thirst and febrile re-action, which may be either continued or remittent. After a few days, when the blood has become altered by the purulent matter, new symptoms arise, which constitute the second period of the disease, or that of *infection.*

The patient now experiences chills at irregular intervals, but sometimes recurring periodically, and followed by a dry and hot skin and often copious sweats: he is agitated, tormented by fantastic imagery; his ideas are somewhat confused, and at last continued delirium sets in. The face is shrunk, pale or of an earthy hue, and yellow; the features indicate apathy and loss of intellect; the eyes are encircled with a blue streak; the tongue is dry and dark and trembling; there is often a fœtid diarrhœa; the pulse is small and weak, and the strength entirely gone. In this period we see break out in different parts of the body, such as the cellular tissue, or in the thickness of the muscles, those abscesses already spoken of. In some, jaundice supervenes, and coincides with lobular abscesses of the liver. Others complain grievously of violent terebrating pains in the joints, which are now most generally filled with pus, while, again, others are attacked with acute pleurisy, or are taken with a dry cough, oppression, and dyspnœa; symptoms referable to the formation of lobular abscess in the lungs. Under an aggravation of the disease by these lesions, the patient sinks at the end of the third week. If the issue is to be favorable, there is a gradual diminution of the local and general symptoms before the coming on of the period of infection.

Under the varieties of phlebitis, our author mentions *Uterine* or *Puerperal Phlebitis*, *Phlebitis of the Cerebral Sinuses* and *Crural Phlebitis* or *Phlegmasiæ Alba Dolens.* In the description of the last variety he follows closely the writings of Dr. R. Lee on Puerperal Fever and Crural Phlebitis. The treatment of phlebitis must be conducted on the same general principles laid down in treating of arteritis. In cases where the disease has followed bleeding, Dr. Physick, and since his recommendation of it, many American physicians have found great service from the use of blisters, applied directly over the inflamed vein. Compression of the vein beyond the limits of the inflammation on the side towards the heart, so as to cause adhesion of its walls, or the formation of a coagulum has been successful in a number of cases. When, however, the anostomozing veins, producing a free collateral circulation, is great, this cannot succeed. When the inflammation has subsided in a measure or entirely, and there remains œdema of the limb, stimulating embrocations and bandages will be indicated. A lecture consisting of fifteen pages is devoted to the consideration of the pathology of dropsy in general—this lecture is for the first time introduced into this edition. Dr. Bell premises by saying, "That the pathology of serous of effusions in different regions of the body, constituting what is designated by the term dropsy, resolves itself into that of organs, heart, kidney, or liver, or of the membranes, pleura, pericardium, peritoneum, or arachnoid, on the lesions of which the serous effusions depend. If we connect this proposition with that of an altered composition of the blood, we have the key to the pathology of dropsy." After some general remarks on the definition of dropsy in general, and in particular as relates to cavities and parts, he remarks that the division of dropsy into idiopathic and symptomatic is more speculative than real, since there is reason to believe that all the forms of dropsy are consecutive on a lesion of some organ and interruption to the circulation, particularly the free return of blood by the veins. Even when the cause seems to be, and in fact is, a change in the composition of the blood, which so far would indicate primary general disorder, it will be found, notwithstanding, in most instances, that this change in the blood is itself the result of some antecedent organic lesion, as of the kidneys for example. A disproportion between the secretion or exhalation and the absorption of serous fluid has been assigned as the more direct cause of dropsy, by which either the secretion has been excessive and the absorption normal, or the latter less than usual, while the former is in a customary proportion. The first state, or that of hypersecretion, without corresponding activity of absorption, has been called active dropsy: the latter, or of feeble and defective absorption with normal, but still, under the circumstances, disproportioned secretion, has been termed passive dropsy. Nearly similar meanings have been attached to the division of dropsy into sthenic and asthenic. There is, however, this additional consideration, that in active or sthenic dropsy, we expect to find the disease accompanied by symptoms of excitement and re-action, and to run its course rapidly; and to show itself in comparatively robust and sanguine subjects—the whole evincing a secretory irritation or sub-inflammation. Asthenic or passive dropsy, on the other hand, resulting immediately from deficient absorption, pursues a slower course, and is not associated with symptoms of excitement or re-action; dropsy from obstruction to the free return of the blood by the veins is adduced as a specimen of the passive variety; and that following increased arterial action as one of the active variety. Without formally admitting these divisions, says Dr. Bell, we shall find it useful, in practice, to be aware of the modifications in dropsy, produced by a general excitement, or depression, or by accompanying phlogosis, or congestion, as the case may be.

Causes of Dropsy.—As will be perceived by what has just been said, our author admits of two chief causes of this disease; first, retarded or interrupted circulation of blood in the veins, and, second, an altered composition of the blood, especially by a diminution of its albumen: he says, often we meet with serous effusions, the direct result of inflammation, as in the application of cantharides, or severe heat to the skin; and also in the more common pathological conditions of the membranes in pleuritis, pericarditis and peritonitis. And even in the cellular tissue, when inflamed, there is some serous effusion, but the secretion of serum, in these cases, is part of the series of phenonema of inflammation itself, and if such secretion were only found coupled with phlogosis, there would be no occasion for speaking of dropsy apart from its cause and antecedent, as well as its accompaniments, such as the effusion of coagulable lymph, and the formation of false membranes.

There is, however, a state of the general circulation, and of particular organs and membranes, short of inflammation, but yet far from atony, that would allow of mere transudation, by which, after copious secretions or effusion of serous fluids takes place, so as to constitute the deposition and swelling known by the term dropsy. Dr. Bell here goes on to prove the truth of the proposition contained in the foregoing analysis, but the length necessitates us to refer the reader to the work itself for the arguments.

Pathology of Dropsy.—In speaking of this he adopts the classification of Vogel in his late work, as will be seen by the following analysis which he gives:

> The *anatomical characters* of dropsy, separated from those of the organs on the lesion of which it so often depends, consists almost entirely of the appearances of the fluid effused. There are varieties which would almost constitute divisions, depending on differences in this fluid under different circumstances of cause and seat, that merit notice. Dropsical fluids are divided by Vogel into—1. *Serous* dropsy, in which the fluid is identical in its qualitative chemical composition with the serum of the blood. 2. *Fibrinous* dropsy, in which the fluid contains dissolved fibrine, and in its chemical composition resembles the plasma of the blood. 3. *False* dropsy (*hydrops spurius*), in which the fluid differs essentially in its chemical composition from either of the preceding forms. Blood and pus, &c., are frequently mixed with dropsical fluids. 1. Of these divisions *serous* dropsy is by far the most common: it resembles closely the serum of the blood. "A pure dropsical fluid is generally nearly clear, limpid or colorless; or, it may be of a yellowish-green tint, more or less turbid, opalescent, and whey-like." Its yellow or yellowish-green hue is caused by the presence of bile-pigment: as a red one is dependent on hæmatine, a milk-white turbidity on the admixture of fat or epithelium scales, or of albumen, if the fluid be very aqueous. A large quantity of albumen renders its viscid, a very large quantity renders it thick, tenacious, and capable of being drawn out in threads, like albumen itself. Its alkaline re-action, like that of the blood, seems to be due to alkaline carbonates or basic phosphates. An acid re-action is rare, but sometimes occurs in dropsy after miliary fever and acute rheumatism. "Under the microscope, the effused serum appears as a pure fluid: it frequently, however, contains a small amount of corpuscles, which on standing form a more or less abundant sediment. This sediment may possess various properties, and be dependent on very different modes of origin. It may contain fragments of epithelium from the serous surface, accidentally mixed with the fluid pus-corpuscles from secondary suppuration, blood-corpuscles accidentally present, or finally, but rarely, an actual deposition of inorganic matter the fluid of hydrocele frequently contains a crystalline deposit of cholesterine." The chemical constituents of the effused serum vary in their amount, but are identical with those of the serum of the blood. They consist of water, organic

substances, especially dissolved albumen (1 to 58 parts in 1000), fat and extractive matters, sometimes also small quantities of urea, bile-pigment and hæmatine, and various salts, chiefly alkaline and earthy carbonates and phosphates, and chlorides. In three cases of dropsy, Marchand found 4·2, 6·8, and 5 parts of urea in 1000 parts of fluid. In other cases again this substance is entirely wanting or in exceedingly minute and barely-appreciable quantity. Of the salts, chloride of soda is usually the predominating ingredient. The fluid formed in the bullous exanthemata and in the vesicles resulting from burns and the action of cantharides, and in gangrene, is identical in its chemical composition with the fluid of serous dropsy. A curious and inexplicable fact is mentioned by M. Andral, viz.: that the proportion of albumen varies, in the same subject, in the effused fluid found in different regions of the body.

2. *Fibrinous* dropsy, as implied in its title, is distinguished by the effused fluid containing fibrine in a state of solution. Like serous dropsy, it may form either in serous cavities or collect in the parenchyma of organs, either by infiltration or by filling recently-formed cavities in them, as, for instance, in the substance of the brain. Examined immediately on its discharge, this fluid resembles, in all points, that of serous dropsy. But, some time after its discharge it coagulates in consequence of holding fibrine in solution, and forms a homogeneous tremulous jelly, which, after standing for some time, separates into a partially-consistent, colorless, or yellowish-red clot of coagulated fibrine, and a clear yellowish fluid analogous to the serum of the blood. On washing the clot with water, and pressing it between folds of fine linen, we obtain a small quantity of tolerably firm, stringy fibrine, precisely similar to that which may be obtained from fresh blood by stirring and thoroughly washing. The coagulation of the fibrine sometimes takes place in the body during life. In its chemical composition this fluid is found to consist of serum with the addition of dissolved fibrine, and as consisting of serum it has of course albumen in its composition, but albumen in reduced proportion such as presents itself in serous dropsy. It is almost identical with the blood, wanting its corpuscles.

As serous dropsy may be supposed to be dependent, in its ultimate formation on the transudation of serum through the walls of the veins, so may fibrinous dropsy be admitted to come from a dilatation of the capillary vessels and a tension and attenuation of their walls. The causes in the former are frequently mechanical, those in the latter dynamical and connected with particular changes in the nervous system. A slight modification of the discharge of the fibrinous fluid of dropsy will be followed by the formation of false membranes, and hence the co-existence so often of these latter with dropsical effusions. The fibrinous effusion is the most common occurrence after pleuritis or pericarditis; and occurs, but rarely, after peritonitis succeeding paracentesis.

3. *False* dropsies are those in which, instead of a morbid serous effusion on the serous surfaces or in the cellular tissue, there is merely an accumulation of the fluid habitually secreted by the organs, and retention of it in its cavity by obstruction of their excretory ducts. Of this kind are *hydro-nephrosis* or *hydrops renum*, dropsy of the kidneys, *hydro-metra*, dropsy of the uterus: also dropsy of the Fallopian tubes, of the gall-bladder, of the appendix vermiformis, of the cæcum, and of the lachrymal sac. The fluid in this form of dropsy is therefore identical, at first, with the secretions which have thus given rise to the tumor, or enlargement of the organ. In the kidneys it is the urine, in the intestines, uterus and Fallopian tubes it is a product of the secretion of the mucous membrane, &c. The secretion, if retained for a length of time, may undergo certain changes; and hence, for example, the fluid of the dropsy of the kidneys is not always identical with normal urine.

Symptoms of Dropsy.—A very perfect sketch of the symptoms is detailed, but we can only refer to those which relate to the urine. These should be studied with great attention, not so much indeed to aid us in determining the existence of dropsy, which, as a general rule, is not difficult, but in order to detect the particular organic lesion giving rise to the effusion. For, says Dr. B. :—

> When albumen is found in the urine, it is assumed to be an evidence of renal affection—congestion, if not granular deposit in the kidneys. But, although we may have good reason for fearing this state of things when albumen is continually present and abundant in the urine, yet it is not invariably so. Under a considerable variety of circumstances, particularly of febrile excitement and temporary irritation of the kidneys, albumen is found in the urine. It is also met with at the crisis of a number of acute diseases, viz.: intermittent fever, typhoid fever, measles, smallpox, scarlet fever and pleuropneumonia, as noticed by M. Martin-Solin.
>
> What is said of the albumen will apply with still more force to the presence of other substances in dropsical urine. It would be impossible, were we restricted to an inspection and analysis of this fluid, and prevented from seeing the patient, to infer positively that he was suffering under dropsy. We might, from this partial evidence, make some approach to a diagnosis of certain organic affections, particularly of the liver or of the kidneys, and in degree of the heart also, but without our being able to affirm that serous effusion was an accompaniment at the time. Simon, although he tells us, that, during dropsical affections, the urine differs considerably from its normal state ; its quantity being generally less than in health, and that it presents various peculiarities in quality—yet he fails to furnish us with the proofs of this assertion. If, in dropsy, it is sometimes dark, very acrid, rich in uric acid, and, according to Schönlein, in urea also, and sometimes contains blood, it exhibits these properties, also, in inflammatory affections ; so likewise if pale and opalescent, we find these characters in anæmia unconnected with dropsy. In chronic hydrothorax, a thick fiery red urine is generally passed, which speedily deposits a considerable sediment of a brick-dust or rust-red color—an appearance and deposit met with in many diseases in which there is a predominance of uric acid and urate of ammonia. In these varieties of ascites arising from affections of the liver the urine resembles that which is excreted in hepatic disease without effusion, as where it is diminished in quantity and is of a dark-red or brown color, sometimes without deposits, and at other times throwing down copious lateritious or fawn-colored sediment.

Treatment of Dropsy.—The first indication in the treatment of dropsy is to remove the cause, the second to promote an absorption and subsequent excretion of the effused fluid. The fulfilment of the first, however, is frequently beyond our control. And the most that we can do is to mitigate its force or prevent its increase, as in cases of valvular disease, or hypertrophy of the heart. When the liver is chronically affected, or the kidneys become the seat of albuminaria, remedies addressed to these organs promise better results. There is often a vicious circle in dropsy, when it is dependent primarily on organic lesion, which we find a difficulty in breaking in on. The affected organ, the heart, for example, prevents the regular transmission of the blood from the auricles to the ventricles, and there ensues venous accumulation and congestion ; which again in its turn oppresses still more the heart and impedes, in an increased degree, its propelling power. In this instance, we have a double indication to fulfil ; the first, to remove the venous congestion in order to relieve the oppressed heart ; and the second is to remove the distention accompanying the congestion of the veins, in order to diminish and arrest the effusion which constitutes the dropsy ; in doing this, we meet also happily the second of the two chief indications for the treatment of dropsy, viz.: to promote the absorption of the effused fluid; and this will be best effected by a resort to blood-letting. We must, however, bear in mind that this is only temporary; this temporary relief affording time for a resort to such remedies as act directly upon the kidneys, skin, and intestines. In order to derive salutary effects from the use of diuretics, says Dr. Bell, we must place, as nearly as possible, the kidneys in a physiological condition. And before administering remedies, remove existing congestions of these organs, or if granular disease be present, address ourselves to a mitigation, if not removal of this morbid state, by other means, used conjointly with diuretics. Recourse to the latter will be preceded by blood-letting or cupping the loins, calomel, and antimony. If we encounter difficulty in restoring the kidneys to their normal condition, or in the process of doing so itself, we ought to relieve the veins by free purging, the extent of which, and the selection of articles to procure it, must be regulated by the state of the gastro-enteric mucous membrane. Should it be free from any marked difficulty, drastic purgatives may be freely and frequently administered. In atonic dropsy, and in the more advanced stages of the disease, when the circulation is languid, great benefit may be derived from the use of the warm and vapor bath and diaphoretics, than from any other mode of treatment. The following quotation, in a few words, contains a good summary of the treatment in general, as recommended by Dr. B.

> While general or local polyæmia, as the case may be, and venous congestion are relieved by depletion, and the dependent dropsy thereby mitigated or removed, it must be remembered that their recurrence will be prevented by an increase in the tone of the vessels and heart itself; and that hence, after blood-letting, and while purging and causing increased diuresis—bitters, tonics and narcotics are not only admissible but decidedly beneficial. More especially is this course required in dropsy complicated with intermittent fevers, anæmia, chlorosis, or resulting from hemorrhage. In every period of dropsical effusion and in every modification of treatment, the primary lesion of the suffering organ must be continually watched. We may, while acting on the intestinal mucous surface, or on the kidneys, or on the skin, in succession or alternation, with a view of procuring the absorption and discharge of the effused fluid, sometimes carry on concurrently a treatment adapted to restoration of the organ to its customary state, or at least a notable mitigation of its lesion. Thus, for instance, in ascites depending on liver disease, mercury and iodine may be usefully administered; in anasarca resulting from hypertrophy of the heart, or following chronic endocarditis, small bleedings, digitalis and iodine will serve a good purpose. Dropsy connected with diseased kidneys will point to local bloodletting from the lumbar region, and in atonic states of the system with cold skin and feeble circulation, to the application of a large blister to the same part.

Some very valuable observations follow on the particular treatment of dropsy, dependent upon valvular disease of the heart, but our space will not permit a notice.

Diseases of the Eye—consisting of three lectures, comprising thirty-six pages, next claims our attention. The lectures are introduced into this edition for the first time. They treat only of the inflammatory diseases of the eye; the description of fixed structural lesions, with their treatment by operations, belongs to the province of surgery proper. Many of the most important of these cases are, however, (remarks Dr. B.) the result of inflammation, and too often attest the want of skill of the physician in failing to arrest the disorganizing process, fully as much as any extraordinary violence of the cause. The practice which has for some time past been so fashionable, viz. : of making a specialty of the diseases of the eye, Dr. B. declaims against as contrary to the instructions furnished by a knowledge of the pathology of tissues, and also as detracting from the reputation and usefulness of the general practitioner. The truth of these remarks, few. if any, will question. For, says Dr. Bell, it is obvious enough, after a very slight survey of the premises furnished by general and morbid anatomy, and by physiology and pathology, that the study of the most important and greater number of the diseases of the eye cannot be resolved into mere ophthalmic surgery, in the narrow and arbitrary sense in which this is generally understood, viz. : readiness and dexterity in the use of instruments, or as it is generally termed, performance of operations, and recourse to certain local applications conventional or of empirical repute. Unless a man by the extent and accuracy of his knowledge of pathology and therapeutics, be fitted to assume the management of diseases in general, and especially of the phlegmasiæ, he ought not to presume to treat diseases of the eye and its inflammations, whatever may be the dexterity of his manipulations, or in the use of cataract knife or needle. No part of the practice of medicine can be thus resolved into a branch of mechanical skill. What should we say of a man's competency, and not only competency, but superior claims, to treat peritoneal inflammation and ascites, because he could perform readily the operation of *paracentesis abdominalis*, or of anasarca on the strength of his being able to apply neatly a bandage ? It behooves the general practitioner, and most men in the United States are of this class, to check the continual tendency in the community to take out of his hands the treatment of the diseases of a particular organ,—the eye or the ear, it may be even the lungs, or the uterus—and assign it to some specialist, who is too apt to forget that his favorite organ has both structural and vital connections with other organs, and that it acts on them and is impressed in its turn by them in a manner and through causes, hygienic and medical, of a wider range than comes within the scope of his mental vision. The remarks of Mr. Travers on this same subject we cannot refrain from copying here—they amply illustrate the decided objection which has, and still continues to exist, to these specialties. In the preface to his very valuable *Synopsis of the Diseases of the Eye*, &c., he says : "I have always thought that the advantages obtained by the subdivision of professional talent and labor, are infinitely overbalanced by those which arise from the general and undivided application of those instruments of knowledge. No fact more strikingly illustrates the truth of the doctrine, that the confinement of any branch of the profession to the hands of a few, operates prejudicially to science, than the state of the profession in this country, concerning the diseases of the eye.

Among the inflammatory diseases to which the eye is subject, there is perhaps no one, which so often tests the skill of the physician as that of iritis. In some one of its forms, it is not an uncommon disease, and when present, demands of the physician a close attention, both in regard to a correct diagnosis, (which generally is not difficult,) and a careful, judicious and successful treatment. The following remarks on inflammation of the iris, will convey a tolerably good idea, of the clear and distinct manner with which Dr. Bell speaks of the remaining affections of the eye treated of in this edition.

IRITIS—*Inflammation of the Iris.*—A knowledge of the structure of the iris, coming as it does under the head of the erectile tissues, and of course being very vascular and nervous, would prepare us for a discovery of its frequent lesions and functional disorders. Iritis may be either primary or secondary. In the latter case it follows inflammation of the tunics of the eye, as of the conjunctiva, sclerotica, cornea, choroid and retina. This inflammation has a great tendency to an effusion of coagulable lymph and to the formation of adhesions of the iris, particularly of its pupilary margin. It is acute or chronic in its stages and duration, and exhibits numerous varieties depending on constitutional diathesis or taint.

Symptoms and progress.—Acute iritis occurring in persons of a full habit and sanguine temperament, has run its course with such rapidity as to destroy vision in a few days. In other cases it is slower in its progress, not seriously impairing vision until after the lapse of many weeks. These have been termed sub-acute. In a third class again, the chronic, the inflammation is so slow and productive of so little inconvenience to the patient, as hardly to excite attention until decided functional obstruction occurs.

The symptoms of acute iritis are a dull pain or sensation of fulness, accompanied with pricking of various degrees of intensity, slight photophobia and confused vision, contraction and diminished mobility of the pupil, which is fixed and of a dark color. But the most characteristic symptoms of iritis are, a general change in the appearance of the iris, beginning at its inner or pupilary margin, and redness of the white of the eye, in the form of a red circle or band round the cornea. With a reddish or or rusty-brown discoloration of the inner circle, there is, also, thickening of the pupilary border. " A light-colored iris assumes, under inflammation, a yellowish or greenish tint; occasionally, it is distinctly yellow; and if the eye be blue, a bright green is sometimes seen. Generally, however, the tint, whether yellow or green, is of a dull and muddy cast, and darker than in the sound state. In case of the iris being naturally dark-colored, it is less altered under inflammation, presenting merely a reddish tinge. Together with these changes of color, there is a complete loss of its natural brilliancy; it becomes dull and dark, and the beautiful fibrous arrangement, which characterizes it in the healthy state, is either confused or entirely lost." (*Lawrence op. cit.*) The inflammation of the iris which begins at the inner circle is sometimes restricted to this part, but more commonly it extends to the outer or ciliary border, and it is then that the red band round the cornea, formed by the vessels of the sclerotica, is observed. The color of this band is of a vivid red in acute iritis, and if this latter be intense the whole visible surface of the eye is of a uniform fiery redness. The red zone lasts as long as the inflammation of the iris continues; and if there should be only a section inflamed, the redness of the sclerotica is confined to the part corresponding with it.

When the disease becomes fully developed, the pain is more severe and even acute, extending from the eye to the supra-orbitar region, and it is accompanied with increased lachrymation. The motions of the pupil are more and more impaired, until, with the increasing effusion of lymph, they are lost entirely: the pupil becomes gradually smaller and smaller, and it may be entirely closed if the disease is not arrested. Short of this termination, the pupil undergoes alteration in its situation; its edge being fixed at one or more points and free elsewhere. Sometimes it is angular and otherwise irregular. The diagnosis derived from the altered figure of the pupil, as alleged by Sichel, is not sanctioned by the experience of others. Thus he tells us that in rheumatic iritis, it is elongated or oval, its long diameter being in a vertical direction; in the arthritic variety it is transversal, and in the syphilitic it is obliquely oval or in a direction from below upwards, and from without inwards. The effusion of lymph in iritis shows itself in the texture of the iris, causing the changes of color already described, in the form of a thin layer; or in distinct masses of a yellow or reddish-brown color, varying in size from that of a pin's head to a split pea, which may be deposited on the edge of the pupil, or on any part of the anterior surface of the iris. A true abscess of the iris itself may be formed. Effusion may take place into the anterior chamber under the form of *hypopion.* Lymph may be poured out from the margin of the pupil or uvea, so as to agglutinate them partially or generally to the capsule of the crystalline. A mass of lymph sometimes fills the pupil; but, more commonly, a thin grayish web or film stretches across the opening, which loses its clear black color, and has a cloudy appearance.

The iris during the progress of inflammation swells, or at least appears to swell; and it approaches towards the cornea, becoming convex in front, diminishing the anterior chamber and sometimes having its surface puckered and irregular. If the disease be not checked, the inflammation passes from the ciliary circumference of the iris to the corpus ciliare, the choroid coat and retina, with increase of pain and fever, and ultimately with irrecoverable loss of vision, from change in the structure of the retina. Forwards, the cornea becomes more opaque, the conjunctiva more inflamed, "so that the case which was, at first, simple iritis, becomes subsequently ophthalmitis, or inflammation involving the external and internal tunics." Adhesions and the formation of an adventitious membrane on the pupil, and its final closure, are farther consequences of iritis.

The constitutional disturbance in acute iritis is often considerable, in its being attended with headache, thirst, loss of appetite, costiveness, and a full and strong pulse.

Causes.—These are the same with the causes of ophthalmia in general—wounds, surgical operations, particularly for cataract and artificial pupil, excessive exercise of the eye on minute objects, suppressed perspiration; other diseases, such as gout, rheumatism, syphilis and scrofula. Some writers, and among them is Mr. Travers, believe that the excessive use of murcury is a cause of iritis. It has been alleged that the greater frequency of the disease in syphilitic subjects is owing to the large use or abuse of mercury in these cases. On this point Mr. Lawrence shows that iritis has occurred in very many persons laboring under syphilis who had not taken any mercury.

Treatment.—This should be actively antiphlogistic, while, at the same time, the tendency to closure of the pupil and adhesions of its border is prevented by the external application of belladonna. Venesection should be early and freely resorted to, and active purging procured at the same time. The common indication for bloodletting, in a strong and full pulse, need not be regarded as a necessary guide in the disease before us, if the organ itself manifest the symptoms of active phlogosis, and deposition of lymph with its associate effects. As in other phlegmasiæ, however, when we have controlled the morbid excitement of the heart by venesection, but the inflammation of the iris still continues, we may have recourse to local depletion by means of cups or leeches to the temples, or behind the mastoid processes. Auxiliary to sanguineous evacuations will be the regular use, at short intervals, of tartar emetic as a contra-stimulant. In the opinion of many ophthalmic surgeons and writers, there is a still more urgent call for the use of mercury, which they allege to have a peculiarly controlling power over iritis. Calomel and tartar emetic may be advantageously combined together, and both with nitrate of potassa, as in the treatment of most of the phlegmasiæ in this country. In harmony also with our experience in this class of diseases, is the fact that mercury cannot be relied on unless and until prior depletion by blood-letting and purgatives have been employed. Then will its good effects be conspicuous. On the other hand, although the antiphlogistic and antimonial treatment alone will suffice in some cases, yet in others, notwithstanding that it was highly proper and indeed necessary in the very early stage, yet it fails to cure, without the aid of mercury.

In cases of sub-acute iritis, small doses of mercury continued for a length of time, but without causing salivation, are preferable to larger doses of medicine. I have derived the best effects in this form of disease, after topical depletion, from the use of the iodide of potassium, administered in moderate doses during the day, and a pill of blue mass and hyoscyamus at night, aided by sustained pustulation of the temple of the affected side with tartar emetic. It is in the sub-acute and still more in the chronic form of iritis, that counter-irritation, either by the means just mentioned or by blisters or even a seton to the temple or to the nucha, will be found serviceable. Active purging, with the use of the blue pill daily, will contribute not a little to the desired end. When confidence is reposed in the efficacy of mercury as an alterative, its combination with chalk, as in the *hydrargyrum cum cretâ*, should be preferred as least liable to disturb the digestive organs.

The use of belladonna or of stramonium, in the form of extract diluted with water, or made into ointment, rubbed on the eyebrows and eyelids, is an important aid to the general treatment, by its active effects in dilating the pupil, and preventing and even breaking up adhesions of the iris to adjoining parts, and especially the membrane of the crystalline. In order to give effect to the narcotic action of the belladonna active depletion ought to be premised in acute iritis.

I shall not enter into details of treatment for the several varieties of iritis, viz., the rheumatic, gouty, syphilitic, and scrofulous, as the modifications in the general outline which I have just now sketched, will readily occur to you. I may just say, however, that in rheumatic iritis free depletion is required, although afterwards we may deem it advisable to give colchicum and the iodide of potassium; and that in gouty iritis we shall lay more stress on purgatives; and in the scrofulous variety on purgatives and tonics with chalybeates. Syphilitic iritis may seem to call imperatively for the use of mercury; but on this point we shall be guided by the same considerations that influence us in the treatment of syphilis affecting other tissues and organs. You will soon learn that mercury is not by any means a medicine of such indispensable use in any form or stage of syphilis as was for a long time implicitly believed. Of late years the oil of turpentine has been recommended, on the score of its success in the hands of Mr. Hugh Carmichael, of Dublin. He more particularly advises this article in syphilitic iritis—in cases in which the use of mercury is inadmissible. The dose is a drachm, three times-a-day, in almond emulsion, as the least offensive mode of administering it.

We have already carried this analysis much farther than we anticipated when we commenced it: and yet there are other subjects which not only from their intrinsic value, but the important light which the labors of Dr. Bell has thrown upon them, would seem to demand of us, to say the least, a passing notice; these will be found in his observations on epidemic meningitis, congestive fever, and the identity of typhus and typhoid fever. We are compelled, however, to refer our readers to the work itself, and in doing so, we cannot take leave of the Lectures on the Theory and Practice of Physic, without expressing the satisfaction we have felt in the perusal we have just finished, of the many valuable additions which will be found in this edition, many of them we have not touched upon; yet the reader may rest assured, that Dr. Bell has not only "endeavored to do, [*but has done*] justice to the additions both in pathology and therapeutics." A little better than eighteen months since, when he retired from the editorial management of the Select Medical Library and the Bulletin of Medical Science, the profession had the assurance that his "literary labors were not to cease, but that he should from time to time, appear before them in the joint capacity of editor and author." In this, the first fruits of the fulfilment of that promise, we are much pleased and we feel fully impressed with the belief, that in this edition of Drs. Bell's and Stokes' Practice, the profession will find a deservedly-valuable work, one which, in most particulars, comes up to the spirit and demand of the times; one to which the practitioner and student may profitably and safely refer, and one, also, which, from its intrinsic merit, will, we doubt not, find a wide and extended circulation, and many close and attentive readers.

Art. VIII.—*A Practical Treatise on the Diseases of Children.* By G. Forsyth Meigs, M. D., Lecturer on Diseases of Children, in the Philadelphia Medical Association, &c. Philadelphia: Lindsay & Blakiston. 1848.

This is, as its name imports, a practical treatise, including most of the diseases incident to childhood and infancy. It is an octavo volume of 575 pages, printed with good type and on excellent paper; and constitutes one of the series entitled the "Medical Practitioner's and Student's Library."

It is too elementary in its character and too uniform in its style and arrangement to admit of an extended analysis. The author's arrangement is very similar to that adopted by Dunglison in his work on the Practice of Medicine, that is, "the classification of diseases according to the systems which they effect;" and each subject or chapter is methodically arranged, and the facts and opinions clearly and correctly expressed. In his preface the author says, "that in stating what he has himself observed, he has endeavored to do it with the greatest possible accuracy; and whenever the subject has concerned facts susceptible of numerical demonstration, he has invariably, if he has had the means, employed that method of statement, in order that the reader might be enabled to draw his own conclusions."

As an analysis of one chapter will afford the reader a fair idea of the author's style and method of treating his subjects, throughout the whole work, we shall present a summary of his article on

"Pseudo-membranous Laryngitis." After stating that this affection had been generally confounded, by older writers, with various spasmodic affections of the larynx, under the names of suffocatis stridula, cynanche trachealis, laryngitis, croup, &c. he proceeds to a consideration of his subject under the following heads, viz.: *definitions; synonymes; frequency;* "Pseudo-membranous laryngitis," says the author, "is an acute inflammation of the mucous membrane of the larynx, attended with exudation of false membrane. It is the croup of the French writers, and is called in this country slow, creeping, true, membranous, or inflammatory croup." He impresses the necessity of distinguishing it from spasmodic laryngitis or false croup, which is a much more frequent, but far less dangerous disease.

> The frequency of the disease, (says Dr. M.,) is very considerable. During the ten years preceding 1845, there occurred in this city, (Philadelphia,) according to Dr. Condie, 3,977 deaths, under fifteen years of age, from bronchitis, croup, pneumonia, whooping-cough, and other diseases of the respiratory organs. Of this number, 1149, were from croup alone; and as spasmodic croup is seldom a fatal disease, it is reasonable to conclude that much the larger number of these deaths were from the disease under consideration. . . . . During the last five years, I have seen twelve cases of primory pseudo-membranous laryngitis, and in the same period, thirty-one of primary spasmodic laryngitis, of which I have kept a record.

Under the head of predisposing causes, allusion is made to the influences of age, sex, constitution and season. In regard to its contagiousness, the author says: "My own experience has never given me the least reason to suppose that it is propagated in this manner, as I have not known it to extend from one child to others in the same family." And he adds, "the *exciting causes* are but little understood; in none of the cases that I have seen, could the exciting causes be ever suspected." The *Anatomical Lesions* are stated to be false membrane covering the whole or a part of the mucous membrane of the larynx, and extending, sometimes, into the trachea and even the bronchia. The membrane is generally of a "yellowish white color, and from a fifth to a line in thickness." The color of the mucous membrane varies in different cases, from the normal appearance to that of a deep red, or even blackish. It is sometimes "brittle, friable, and thickened, and in rare instances, softened." In the secondary croup of scarlet fever, the exudation, or false membrane, is represented as thinner, less consistent, less adherent, and less uniformly spread over the diseased part; "and in some cases is puriform, soft and of a grayish color." The mucous membrane in those cases, is also generally discolored and softened. In the five pages devoted to *symptoms* there is nothing of sufficient special interest to justify quotation.

Dr. Meigs insists on the importance of distinguishing between those cases which commence in the larynx, and those originating in the pharynx. In the former cases, the first symptoms are hoarseness of voice and croupal cough, while in the latter the first symptoms are those of ordinary anginose inflammation, and these may continue several days before decided symptoms of croup make their appearance.

Concerning *Prognosis*, the author states that, "of the twelve cases observed by himself, six died. From personal experience I conclude that sporadic are less dangerous than epidemic cases, though the mortality is frightful, even in those. The danger is great in proportion as the child is younger and more feeble, in proportion to the rapidity of the case, and to the degree of dyspnœa or orthopnœa."

Over ten pages are devoted to the *treatment* of the disease, which he finally sums up in the following concise and judicious manner, viz:

> My own conclusions in regard to the treatment are, that blood-letting is a valuable remedy, when resorted to in proper cases, and at the proper moment. In the form which begins as angina, and which is generally epidemic, it ought to be used with more caution than in that which commences as laryngitis. In the latter form, which is generally sporadic, it ought to be used more freely, especially in vigorous and hearty children. In children over two years of age, I would take, from three to four ounces of blood from the arm, once, twice or three times in two days, according to the strength of the child, and the degree and obstinacy of the fever. In both forms of the disease, emetics, and I would recommend the alum in preference to any other, should be given once at least, very often twice, and in violent cases, three times in the twenty-four hours, so as to produce vomiting attended with a good deal of effort. At the same time, I would give as a general rule, two grains of calomel with a quarter or half a grain of Dover's powder, every two hours, taking care not to give a dose for an hour before, nor after the time selected for the exhibition of the emetic. In cases in which there is loud stridulous respiration, heard both in the inspiration and expiration, in which previous treatment has had no effect, and in which there is threatening of speedy death, I would give four grains of calomel every hour, until three or four doses have been taken, and direct the exhibition of an alum emetic, after the last dose. Seven of the twelve cases so often referred to, were fairly treated by the mixed method just described. One I saw with Dr. Rutter of this city, two with my father, and four I attended myself. Of the 7, two died and five recovered.

The advantages of *alum*, which the author prefers as an emetic in this disease, are thus stated: "it is certain and rapid in its action, and it operates without producing exhaustion or prostration beyond that which always follows the mere act of vomiting. It does not tend, like antimony, and in a less degree ipecacuanha, to produce adynamia of the nervous system; an effect which, in some constitutions or states of the system, or when it has been exhibited frequently, is often attended with injurious, or even dangerous consequences." These are highly-important advantages, and well worthy of consideration. The alum was first recommended by the author's father, in an article published in 1838. The author makes no mention of the application of nitrate of silver to the larynx, in the treatment of this disease, although several cases illustrating the success of this mode of treatment, have been published in the medical journals within the last two years. These cases are sufficient to render the remedy worthy of mention at least; and from its well-known good effects in pseudo-membranous pharyngitis, we have no doubt but its timely and thorough application will be found one of our most effectual means for combatting this truly fatal disease of the larynx.

The foregoing extracts are sufficient to give the reader a fair idea both of the author's style and his method of treating his subjects; and this is all we have time or space for at present. The work is throughout systematic, well written, and highly creditable to the author; and may be read profitably by every practitioner and student in the country. There is, however, one defect in it, which we regret; and which ought not to be passed by without notice. We allude to the very partial or imperfect manner, in which the author has referred to preceding American writers on the same subject. It is true that the names of Dewees, Eberle, Condie, and others of Philadelphia, appear on almost every page, and their writings are freely quoted; but writers in other sections of the Union, equally entitled to consideration, are scarcely named. Thus, the name of Stewart is mentioned three times, referring, we presume, to Dr. James Stewart of this city; but in such a manner, that no reader could suspect him to be the author of one of the most complete and valuable treatises on diseases of children that exists in our language; not a line nor an opinion of his is quoted from the beginning to the end of the volume. Neither is there the slightest allusion to those exceedingly valuable papers of Prof. J. B. Beck, on the influence of blood-letting, opium, emetics, mercury, &c., on the young subject, which were recently published in the journals of this city, and extensively copied elsewhere.

And though Dr. Meigs devotes a special article to the importance of *re-vaccination*, in which, in addition to his own experience, he freely quotes the opinions of Drs. Condie and Wood, no reference is made to that most conclusive and valuable paper, by the late Dr. Forry, on the same subject, and which received the Boylston prize for 1844. But this is not all; for we find opinions and recommendations on important topics, stated in such a manner as to induce the reader to think them *original* with the author himself, which in all fairness ought to have been credited elsewhere. This is particularly the case in regard to the use of gelatine and animal substances, as food for children, when afflicted with bowel affections. Thus on page 193; he says:

> I would recommend in these cases a diet, which I have found to agree better with children deprived of the breast, than any other that I have ever directed. I have employed it now in a great many instances, and believe it to be the best substitute for the natural aliment that I am acquainted with. It is made by dissolving a small quantity of prepared gelatine or Russian isinglass in water, to which is added milk, cream, and a little arrow-root, or any other farinaceous substance that may be preferred. . . . . . I have given this food to a great many children for upwards of a year past, as well to those brought up entirely by hand, as those partly suckled or weaned, and can truly state that they have thriven better upon it than upon anything that I have ever employed. [Again on pages 307–8, he says,] It may be stated, however, in general terms, that the food ought to consist, at least in part, of milk or cream, a wholly farinaceous diet, as I have so often said, being, as a rule, unsuitable and injurious to the digestive organs. The diet that I prefer, is the gelatine food already described, with a small proportion of milk."

Now, it is true that here is no specific claim to originality in the use of gelatine and milk, instead of the old practice of confining the child exclusively to farinaceous substances, when laboring under diarrhœa, cholera infantum, &c. But sins of omission are sometimes as bad as those of commission; and Dr. Meigs ought to have known, if he did not, that this important change in the diet of children, which is really of more value than any one other improvement which has been made in their management during the last twenty years, was first formally brought to the notice of the profession by Dr. James Stewart, in an article published in the New-York Journal of Medicine, for Nov., 1844.

In this article, Dr. Stewart demonstrates the indigestible nature of the farinaceous substances generally employed, by reference to the numerous post-mortem examinations made by M. Natalis Guillot of Paris, and other experiments; and deduced, from physiological considerations alone, the superior adaptedness of gelatine, &c. And not only so, but he had tested his deduction by experience, concerning which he speaks as follows, viz.:

> For some *years* past, it has been my practice to recommend a thin mucillage or jelly made from isinglass, in the treatment of the affections referred to, when soothing and unirritating food is indicated, in preference to the use of arrowroot, and with so much uniform advantage, that I have been fully satisfied of its peculiar adaptation to the condition of infants. To give instances would be to detail almost every case I have been called to attend.

Ever since the appearance of this article, which the reader will recollect was in 1844, the best practitioners in this city, and many other places, have been in the habit of daily recommending the same kind of food that Dr. Meigs has found so much benefit from using "for upwards of a year past." We have not made the foregoing remarks, either from a fault-finding disposition, or as applicable alone to the work under review. But we allude to this defect in Dr. Meigs' work, solely on account of its bearing on our national medical literature. The profession in other countries, and even the younger members in our own, look to such books as this for a true representation and posting up of the medical writers and writings that have previously existed on the same topics. Hence, a two-fold injury results from every such omission as we have referred to. 1st. It conveys a wrong and depreciated impression of our own medical literature, which every right-minded man should be proud to uphold and extend. 2d. It discourages investigations and directly lessens the disposition of members of the profession, to contribute to our medical periodicals. And, lastly, it betrays on the part of an author, either a lamentable ignorance of the medical literature of his own country, or the possession of a narrow-minded selfishness unworthy of an enlightened member of an honorable profession.

N. S D.

ART. IX.—*Principles of Medicine: comprising General Pathology and Therapeutics, etc.* By C. J. B. WILLIAMS, M. D., F. R. S. Edited with Additions, by MEREDITH CLYMER, M. D. Third American from the second and enlarged London edition. Philadelphia: Lea & Blanchard. 1848. 8vo., pp. 440.

WE are happy to see another edition of this valuable work. The pleasure with which we read its predecessor, made us welcome this volume as we would the face of a well-tried and valued friend. We scarcely know of a more useful and satisfactory work for the general practitioner than the one before us. He who desires to understand the principles of our "noble science," who wishes to rise above the mere routine of a hap-hazard prescriber, to leave the ranks of empiricism, and to become a *scientific physician* "who" as Hippocrates says, "is like a god," can but take delight in the perusal of this work. The old saying of Virgil, "Felix qui potuit rerum cognosare causas," is true to this day, for it expresses a fundamental truth in human nature. Hence a book that traces the causes of disease and the effects of remedies, gives pleasure to the reader, and at the same time confers a lasting benefit upon mankind. Such we sincerely believe this book to be. The author tells us, in his preface, that it contains very extensive additions, comprising the enunciation and application of most of the facts and established deductions made available to the science and art of medicine during the last few years. These additions, he says, pervade almost every portion of the work, but are mostly in the following subjects: "In Etiology, *mechanical, chemical and dietetic causes of disease, defective cleanliness, ventilation and drainage.* In Pathology, the tabular views of the elements of disease; *reflex action of sympathy; elementary changes in the blood; congestion; determination of blood; inflammation*, in its nature, manifold results, and mode of treatment; *degeneration of textures, cacoplastic and aplastic deposits*, and their treatment, with a notice of the action of *cod-liver oil*, and the whole chapter on Hygienics, comprising *food, clothing, air, and temperature, exercise, mental occupation, sleep and excretion.*"

These additions, together with those of the editor, make some sixty pages of new matter, besides an appendix containing articles on the *pathology of gout and albuminuria, the causes and treatment of scurvy*, and on the use of chloroform.

As we suppose our readers are pretty well acquainted with the former editions of this work, it will only be necessary for us to give some extracts from the additions in order to afford them a just idea of the whole as it now appears in a new dress, which, by-the-by, contains the least improvement of any part of the work. In fact the paper and typographical appearance, though fair, are not equal to some of the other editions.

When speaking of intoxicating liquors as an exciting cause of disease, our author says:

> The most disastrous consequences of intemperanceare exhibited by the habitual drunkard, who, in proportion as he indulges in liquor, loses his appetite

for food, and his power of digesting it. He then drinks and starves, and the disease which ensues comprises the exhaustion of inanition with the more direct effects of the alcoholic poison. Thus in delirium tremens, the drunkard's disease, together with the permanent restless excitement of the irritated nervous system, which adds more and more to the exhaustion, the weakness of mind and body is fearful, and in bad cases affect even the organic functions, so that the pulse is very weak and frequent, the excretions scanty and depraved, and the respiration is too imperfectly performed by the involuntary powers to permit sleep to ensue. This exhaustion must soon terminate in death, unless prevented by appropriate treatment; and this must comprise, besides opium, (the common remedy), ammonia and other stimulants to the circulation and respiration; purgatives and diuretics to free the blood from the excrementitious matter that has accumulated in it; and fluid nourishment to repair its waste. Without these adjuncts, opium will not only fail to procure sleep, but its narcotic influence may extinguish the flame of life.

This will strike every one who has seen and treated a case of delirium tremens as giving a faithful representation of the patient's deplorable condition, as well as the rationale of a judicious mode of treatment. After having read this, we were surprised to find our author giving to that which is the source of all this difficulty an important place among his articles of hygiene, and recommending it at the most important meal of the day! When giving his plan of diet, (page 393) for *healthy adults*, he says these beverages may be allowed at dinner—"sound white wine, (Sherry or good Marsala, from one to three glasses,) which is generally better mixed with water, or sound Sauterne, or Moselle unmixed. Those who use much exercise may substitute sound malt liquor, bitter ale being the lightest, and good porter or stout the more sustaining. Half a pint is generally as much as is good for health." This was the more surprising still, after reading again from page 40, "Strong drinks, when taken only or chiefly with food, not as a substitute for it, but as a constituent of general 'free living,' contribute to the production of an abundance of ill-assimilated, overheated blood, which either finds its vent in eruptions on the surface, or in local hemorrhages or fluxes, or causes various functional disorders, such as palpitation, vertigo, stupor, dyspepsia, bilious attacks, &c., or may tend to the production of a fit of gout or gravel. The latter results are promoted by such beverages as contain much free acid as well as an abundance of spirit, such as port-wine, rum-punch and hard strong beer. The less acid malt liquors, ale and porter, tend rather to induce liver disorders, and an abundant deposition of fat in the body." After having stated this, how could an author recommend this bewitching, seductive and intoxicating family of beverages to be taken daily with our food? We hold that a man in *health* needs no such stimulus, and if he takes it, he acquires a *morbid appetite* for it, which in being gratified engenders an artificial demand, that too often becomes uncontrollable, and ultimately makes the man a drunkard. "Total abstinence, therefore, is preferable to moderation *not only* because it is morally easier to practice, *but because* it is more salutary in its physical effects."

In the treatment of anæmia, after having spoken of the beneficial effects of ferruginous and other tonics, he says:

The success of the treatment becomes manifest, not only in the return of a healthy color to the lips and skin, size of the superficial vessels, and strength to the pulse, but also by an improvement in all the functions, breath, strength, digestion, &c. It is a curious fact, that the venous murmurs although diminished, are not so in proportion to the apparent return of color to the surface; I have before given reasons for considering them to depend on deficiency of albumen, as well as of the red particles. This does not accord with the opinion of M. Andral, who reckons the vascular murmurs to be a true exponent of the deficiency of the red particles only; but this, as a matter of observation, loses weight from the erroneous notion which he, in common with Bouillaud, holds as to the true seat of these murmurs. They believe them to be in the carotids only; I several years since was satisfied, from numerous and varied experiments, that Dr. Ogier Ward's opinion, that the loudest murmurs are in the veins, is correct. I may add, that they are to be accurately investigated only by the flexible ear-tube recommended by Dr. Stroud.

The author quotes from his friend, Mr. John Erichsen, to prove a former suggestion of his own, that the congestion in asphyxia results from the contraction of the minute arteries being excited by the passage of venous blood through them, as follows:

But we may go a step farther, and prove that it (venous blood) actually possesses this power; causing these vessels to contract distinctly, as I have several times observed, on examining under the microscope, the mesentery of rabbits, during and immediately after the process of asphyxia. This may be done without much difficulty, as the circulation of these animals, when quite young, continues for many minutes after the struggles of asphyxia have ceased. On asphyxiating a young rabbit, a portion of whose mesentery had been conveniently fixed under a powerful microscope, the following phenomena will be observed to ensue. For about a minute after the struggles of the animal have ceased, the circulation appears to be going on with its usual rapidity; it then gradually becomes somewhat slower, the arteries contracting in size, containing less blood, and assuming a lighter and more tawny color than before; whilst the veins become congested, and evidently fuller, assuming, when viewed by transmitted light, a very beautiful crimson hue. As the circulation becomes more languid, the arteries continue contracting, and acquire a lighter color, the diminution in their size, and the difference in the quantity of blood contained in them and in the veins, being most marked. The motion of the blood in the capillaries now becomes oscillatory, the whole mass of blood being at each impulse from the heart, slowly propelled forward, and then moving backwards. This to and fro motion continues for some time, and then ceases entirely. On restoring the heart's action by setting up artificial respiration, an impulse was evidently transmitted from the blood in the arteries to that in the capillaries, in a pulsatory and jerking manner, which was soon communicated to the veins, driving forward the whole mass of globules accumulated in them, and gradually becoming more equable and powerful until the circulation was completely restored. I have watched these phenomena most attentively in the mesenteries of young rabbits, and have never observed anything like spontaneous movements in the capillaries; the blood contained in which was invariably most clearly and distinctly influenced, solely by the impulses it received from that contained in the arteries. Nor have I ever been able to discover any obstruction in the vessels, in consequence of the adhesion of colorless globules to the sides—a phenomenon that I have watched for, and which has by several been supposed to occur. The diminution in the diameter of the smaller arteries, and the proportionate difference between them and the neighboring veins, were most evident, and were such as could leave no doubt, in my mind, as to the important part that the contraction of these vessels

> plays, in giving rise to an obstruction to the passage of the blood through them in asphyxia; in which I have no doubt that it is the principal, if not the sole agent.
>
> These observations correspond perfectly with what I have many times observed in the frog's web; and we may fairly infer that the same obstruction which operates in the systemic circulation, will suffice also in the pulmonary. The notion of vital attractions of the blood for the vessels, or even of the aggregation of the red corpuscles (suggested by an imperfect observation of Mr. Wharton Jones), as causing the obstructed circulation of asphyxia, is not only superfluous, but untenable, for, were the obstruction in the capillaries and veins, the arteries, for a time at least, should exhibit distention, which the above description proves not to be the case.

His remarks on the degenerations of tissues; upon aplastic and cacoplastic deposits, are particularly interesting. After having treated of tuberculous and other cacoplastic deposits he speaks very highly and encouragingly of the power of cod-liver oil in promoting their removal. Whether his remarks will stand the test of general experience remains yet to be seen. Every discovery in the pathology of this disease seems to be but the dawning light of that glorious day which was so enthusiastically prophesied by Rush, in which Consumption, with all his pale but destructive companions, would be put to flight by the soldiery of medicine. We hail with pleasure any indication of the approach of such a physical millenium. On page 313, the author says:

> Fixed oils also possess a solvent power on the fat of tubercle, and they have no such irritating or active properties towards the textures as to deter us from using them in quantities much greater than can be given of any of the above-named agents, and sufficient to justify the inference that they do exercise a very marked influence on nutrition, and do therefore thoroughly and abundantly pervade the textures of the body. But the greater number of fixed oils soon disagree with the stomach, bowels, or liver, causing nausea, inappetency, diarrhœa, bilious disorders, and other evil effects formerly noticed to result from excess of fat in food, and this they appear to do in proportion to their proneness to absorb oxygen and become rancid, and therefore acrid, and often losing their fluidity. In these respects fish-oils have greatly the superiority, being more permanently fluid and less liable to turn rancid, provided they be not contaminated with putrid matter in their manufacture, (which is commonly the case, and they therefore require to be purified with animal charcoal). Of fish oils, experience chiefly testifies in behalf of that from the liver of the cod; but analogy favors the supposition that spermaceti oil, and seal oil, if equally purified, would be not less eligible, and they would have an obvious advantage in their more abundant supply, and lower price.* But it is important that the oil should be as free from taste and smell as possible, and for obvious reasons, I prefer that which by cooling and settling, or by filtration, is deprived of most of the stearine. Such an oil given in doses gradually increased to a tablespoonful three times a day, in the great majority of cases, agrees well with

---

* I think it scarcely necessary even to advert to a supposition formerly general and still entertained by a few, that cod-oil owes its efficiency either to its offensive impurities, or to any iodine which it contains. I will merely state that in some hundreds of cases in which I have prescribed the oil, the best effects have generally resulted from the use of the purest kind; and in many of these cases, various forms of iodine had been exhibited without producing any of those marked changes which followed the taking the oil.

the stomach and bowels, increases rather than impairs the appetite, and, if continued for some weeks or even months, promotes in a marked degree the function of nutrition, increasing the strength as well as the flesh, and giving incrememt to all the textures. Nor is this surprising when we consider that the nuclei or rudimental molecules of all structures appear to consist of fat, which the oil in its highly divisible state, supplies and renews in the manner most conducive to active and healthy nutrition. Its peculiar fluidity and little proneness to change also enable it to pervade all structures, and to penetrate even into imperfectly-organized deposits, and by softening their concrete fatty molecules, and rendering more permeable and supple their whole mass, brings them more under the influence of the adjoining living parts, through the circulation in which, either their vitality and nutrition are improved and maintained, or, if incapable of improvement, they are gradually dissolved and absorbed away.

Such appears to me the mode of operation of the cod-liver oil, assuredly the most efficacious of all medicinal agents in the treatment of cacoplastic and aplastic deposits, and one which, after two years' constant experience in its use, is still frequently surprising me by the wonders that it occasionally works even in aggravated and advanced cases of scrofula, mesenteric disease, pulmonary consumption, chronic pneumonia and pleurisy, and chronic rheumatism.

The "typhous material" which is deposited in the lungs, spleen, in the glands and under the mucous membrane of the intestines in typhus fever, he regards as bad fibrine or cacoplastic lymph. May not, therefore, this same cod-liver oil be worth yof trial in such cases ?

The editor has made a number of relevant quotations from good authors which enhance the value of the work. He has also added some twenty-five pages of original matter on the subject of semeiology (*original*, we said, but it is so far only as the re-marshalling of ideas long known, can be called such). This article will be read with interest by the medical student.

The author's remarks on hygienics are in the main judicious, and are worthy the attention of all. On the different subjects that enter into this chapter he has spoken briefly, but in such a manner as to make the book desirable if it contained nothing else. Our limits would fail us to go into an analysis of it. We trust we have already given our readers an opportunity of judging of the nature and worth of the *additions* contained in this edition by the quotations we have already made.

We will therefore close our notice of this really valuable work, by making one quotation from its last page, which we do with no little satisfaction and national pride. After having spoken of medicine as embracing a machinery more intricate than a philosopher can devise, a laboratory more subtile than the chemist's, and, in fact, as rising above the material to contemplate and treat the *entire man —physical, moral and intellectual.* He says :

Neither shall I strain your thoughts far to remind you of its moral worth. See its effect on masses of mankind, displayed in the progress of the happy discovery of Jenner! See how even barbarous people and idolaters, Musselmen, Hindoos, and Chinese, respect our nation only for the medical aid which it can supply. So that it has happened that medicine has become the handmaid of religion—a bond between countries, a peace-maker between nations.

But let us not vaunt ourselves. Listen to one who speaks of our art—and that one the eloquent ambassador from the United States, the Honorable

Edward Everett. I quote from the *Times* of the day before yesterday:—"For what was that which constituted the chief pride and glory of the British nation? They had heard of the intercepted letter from one Chinese chieftain to another; and what was the characteristic which had excited the admiration of a mandarin of a great and important empire, reeling at the time under the blows of the British government? Was it the steam-vessels of war reaching coasts in defiance of the desolating simoon? Was it their arms—their artillery—their skill of engineering, which civilized nations now brought to the strategy of war? Was it this, or any of these, which had struck with wonder and awe, and admiration, the barbarians of China? No! It was the humanity of British physicians and surgeons—their management of hospitals, and the generous kindness which was extended to the sick and wounded, even of a hostile nation—which moved them with astonishment, and excited their sympathy and regard. These were some of the arts of peace which extorted the admiration of an enemy, and which other states would do well to imitate."

D. C. E.

ART. X.—*The Influence of Dress in the Production of Disease in Females.* By Dr. WILLIAM D. PURPLE, Member of the Medical Society of the State of New-York, &c. [Read before the Chenango County Medical Society, June 10th, 1847.] Albany: Joel Munsell, 1848. 8vo. pp. 11.

THERE is no truth more apparent (says the author of this essay) to the medical practitioner than the gradual and almost imperceptible change in the pathological characteristics of a given period of time. "It is the duty of the members of the profession to note these changes, and in their associated capacity to investigate their causes; to inquire how far they depend on external agents beyond our control, or are chargeable to the habits and customs of society. It is a maxim no less trite than true, that "man is a bundle of habits," and that those habits are fleeting and transitory. And so far as they can be relied upon, as causes of pathological characteristics, so far will diseases be found "ever varying, ever changing."

Dr. P. then goes on to state that "there is no more potent sovereign over human habits and actions, than fashion. It is true that man is a philosophical being, and a large majority of our sex are controlled by the principles of comfort and convenience in our dress, and although there may be a few who 'ape the ape,' and bow with implicit obedience to the laws prescribed by fashion—yet they are not allowed to contravene the utilitarian standard so far as to interfere with pathological characteristics." Of the truth of the foregoing remarks, there can be no doubt. At the present time, nothing is more evident than that fashion holds over society a control which demands of all classes an implicit obedience, a control over dress, diet, sleep, &c., which saps the very foundations of health—and leads on many a fair and otherwise comely youth to a doubly miserable existence, or a premature death. "Grace, ease, elegance and comfort, are alike immolated to this Moloch, who spares none who pretend to the rank of *fashionable!*"—(GODMAN.) Dr. P. believes that the tyrant of fashion (for we know no more appropriate name to designate it by) holds a most powerful and resistless sway over the female sex. On this point, he remarks:

> But the "fickle fair," of this genus Homo is gregarious in all her habits; with her no sacrifice is too great at the throne of fashion; her whole soul is engaged in her devotion, and she not unfrequently offers her "body as living sacrifice" to the god of her idolatry. The spring and fall costume of Paris or Broadway, has entire control over her—no matter how grotesque she may appear—no matter how it may burlesque the "human form divine"—no matter what may be their present inconvenience, or their permanent influence on health, the rules prescribed by a few interested dress-makers, must be implicitly followed.

In comparing present with past times and customs, and in alluding to the gradual, marked change which has taken place in the personal as well as physical appearance of the female sex within the last half century, our author remarks:

> It would be truly interesting to enter a gallery composed of female figures, habited in the various fashions that have prevailed for the last fifty years. Nor would it be less amusing than instructive to the pathological inquirer. We should see as the representative of the commencement of this period, a lady dressed in what was delicately called a "petticoat," made of flannel, barely large enough to go around the body, and enable her to walk with the measured pace which was then requisite to good breeding; it is pinned loosely around the body under the arms, and supported by short suspenders or shoulder straps. The calico gown, or what was called a "short gown," loose and free, tied with a few tape ties, completes the dress of this representative of our grandmothers in the mild seasons of the year. Then the body had a natural shape, that which an allwise Architect gave it—the several cavities were fitted in size to contain, in their natural position, the various organs. Then there was in ladies, as pertains in gentlemen, a cylindrical form, whose circumference was nearly the same in the throracic, abdominal and pelvic regions—then the functions of the viscera were duly performed, and all moved in harmonious concert. The heart beat freely, the lungs were duly expanded, the stomach and bowels were circumscribed by muscles whose province it is to promote free, general and peristaltic motion—the pelvic viscera had ample room for all their healthy action, and were not compelled to seek less circumscribed quarters to manifest their various functions.
>
> The representative of a modern lady shows us that a change has come over this native simplicity and natural form. An edict has gone forth from the throne of fashion, that art must usurp the prerogative of nature. Not content with her legitimate sphere of controlling in all their endless variety the habiliment of the sex, she advanced a step farther than she even ventured before with reasoning mortals, and declared that the female must be moulded into a more angelic form, and be made to approximate by an hour-glass contraction the sylph-like form of the ant upon the mole-hill.
>
> The mechanical arts were immediately brought in requisition, and the combined powers of the screw, the wedge and the tackle were had in requisition to abridge the work-shop of the vital and animal functions. This was no difficult task. Habit, stimulated by pride of personal appearance at first, made the requisite effort—the slow and gradual yielding of the flexible parts at a young and tender age, stimulated the votary to perseverance. The stimulus of pressure became more and more tolerable, until like other bad habits, it became to a certain extent essential to personal convenience.

After this, he goes on to specify some of the derangements of position and function of organs, which result from the truly awful torture to which the female portion of society are subjected. But our space will not permit an enumeration of them; they are, in a measure at least, well understood by the physician, and yet their effects are not readily within his control. Removal of the primary cause is not in all cases followed by a cessation of the effect. Is this to be wondered at, when we remember how great a displacement of the pelvic and abdominal viscera is present in such instances? Who is there, that would not in view of this, be led to exclaim in the language of Godman, "It is impossible for a benevolent mind, acquainted with the reality and extent of the mischief thus produced, to behold youth, grace, and beauty sacrificing the dearest boons of life to the tyranny of perverted taste and preposterous fashion, without experiencing emotions of profound regret for the immediate victims, and sighing for the future condition of a posterity derived from such a parentage." In speaking of the diseases, &c., which are produced in females by the modern style of dress, Dr. P. says:

Can I be mistaken in the charge that this general displacement, and the consequent symptoms, are produced by the pressure of the modern style of dress? Is there a doubt that a large proportion of these cases are mainly or entirely chargeable to external pressure? Why do not these symptoms occur in the male? Can there be a doubt that similar sensations would, in him, follow the same abuse? These symptoms are not confined to the uterine system; they are not the result of uterine action; they do not belong to its physiological or pathological characteristics, and yet all grades and classes are affected by them, and perhaps not one in five is entirely free from their influence. The higher circles of society, those most subservient to fashion's control, are the most exposed to all these symptoms; they exist for years unknown to their most intimate friends:

"They are deep and hidden griefs,
That come from sources that admit of no complaint,
From things of which she cannot, dare not speak;"

and hence they become chronic, under the nursing care of the cause that produce them.

This abuse of the system is insidiously introduced. It is interwoven in the very formation of society. The subjects themselves know not its influence over their physical health, and like the deluded votary of the intoxicating bowl, they are the unconscious authors of their own abject wretchedness. It is true that some can endure it with impunity, but others, of a lax muscular fibre, are greatly affected by it. Hence we see all varieties and grades of disease from this cause, from slight nervous irritability, to the confirmed bed-ridden subject. If the subject is alluded to by a medical adviser, a broad denial is the usual reply, and the subject is evaded, as delicate and holy ground. A large proportion will tell us they do not "dress tight;" but it is only *comparatively* they speak; for if they should dress as the other sex, they would feel "all unstrung.' The habit is commenced in early youth, when the system is growing, and although after the attainment of a certain age, it may be gradually diminished, yet the organs have an artificial position, and its effects exist in many instances through life, and may, and doubtless in some instances do, transmit its deteriorating influence to posterity.

The ordinary modes of treatment, when successful, confirm the pathological views here taken. The pessary, the supporter, and lace, all, to a certain extent, exert a counteracting mechanical influence, and relieve momentarily the hernial tendency. But while the cause remains, they only serve to compress the viscera into a still smaller compass, increasing many of the symptoms without relieving the remainder.

The curative indication is to remove the cause; to remove every obstruction to the due development of the internal organs, and a healthy discharge of their functions. Let them, as nature designed, control their own space, and their own appropriate position in the animal economy, and a healthy and a vigorous action will be the result. These symptoms are, as I have endeavored to show, the creatures of *fashion*, are entirely of modern origin, and are not among the "*ills that flesh is heir to*;" and when the cause is removed, by restoring the female form to its legitimate proportions, they will entirely cease from among us.

The view which the author here takes in regard to the primary cause of the physical imbecility of the female sex of the present age, viz.: that it has its origin in the "folly of fashion," and ought not to be considered as having its rise legitimately among the "ills that flesh is heir to," we think perfectly correct.

In connexion with this subject, I must allude, before I close, to the very imperfect manner the skin is protected by the fashionable dress of the females of our country. Whoever regards with a physiological eye the functions of the skin, and takes into consideration its very delicate texture, the extraordinary amount of its excretion, and its very intimate sympathy with the functions of the uterus, cannot but be convinced that the health of the female very much depends on its being well protected from sudden changes of temperature. The warm stove rooms of our modern houses, form a very great contrast with "the peltings of the pitiless storms without," in this our northern climate. The dress of our ladies bears no proportion to the rigor of the colder seasons of the year, nor to that worn by the more hardy sex. It is true, if they are to ride, more care is taken; but if their daily avocations call them to the open air, they are found with the body but feebly protected; the chest with a thin, tight fit; the neck bare, the arms with but a single thickness of calico, their feet with the thin-soled slipper; the ample folds of their skirts so carefully removed from the body that the wind "bloweth where it listeth," and although we "cannot tell from whence it cometh," yet it is no difficult task to tell "whither it goeth." It finds ample room to revel in all its "wanton wildness" on three fourths of the surface of her body. Clothing, in order to guard the delicate functions of the skin, requires to be in actual contact with it; and the style imposed by fashion, of the female dress, doubtless lays the foundation of much of the weakness of the "weaker vessels" of our species.

It is our duty to awaken attention to these subjects; to expose the "folly of fashion" in our daily professional avocations, and to attack the *cause* of many of the diseases and weaknesses incident to females; to explain the reason why our ladies are not as healthy as their grandmothers were, and are becoming every year more and more effeminate. In reply to their complaints, we should endeavor to convince them that medicine will have little or no effect, unless the cause is removed; we should appeal to mothers, to let nature mould "the human form divine." We should cry aloud and spare not, until the galling bonds of *fashion* shall cease to drag our ladies to the dust; then, and not till then, will they breathe more freely, and posterity assume a more hardy character, and award the meed of praise to those who closed this prolific source of some of the most dangerous and uncomfortable diseases that have in these modern times escaped from Pandora's box.

In our admiration of the able and fearless manner with which the author of this little pamphlet has treated his subject, we had almost forgotten to state that it was first published in the Transactions of the New-York State Medical Society, for the present year. Certainly its author deserves our warmest praise for the interest he has thrown around this subject—a subject which called forth from the pen of the unfortunate and ever to be lamented Godman one of his most able and classic essays.

BIBLIOGRAPHICAL NOTICES.

Art. XI.—*An Account of some of the most important Diseases of Women.* By Robert Gooch, M. D. With illustrations. Second edition. Philadelphia: Barrington and Haswell. 1848. 8vo. pp. 322.

We are confident that nothing can be said by us which will, even in a small degree, render more popular this work of Dr. Gooch. It has for many years been before the profession of this country; and notwithstanding the numerous more recent publications, it is still demanded by the wants of the profession. It does not claim to be a complete treatise on the diseases of females, but upon the subjects of which it treats, we know of no work so sound in principles and practice as this little book. Presuming that most if not all our readers are well acquainted with it, we can say to such as do not own it: it is one which possesses peculiar claims to your attention, and is one of a very limited number which can be truly said to possess a thorough practical character.

Art. XII.—*Medical Chemistry for the use of Students and the Profession: being a Manual of the Science with its application to Toxicology, Physiology, Therapeutics, Hygiene, &c.* By D. P. Gardner, M. D., formerly Professor of Chemistry in the Philadelphia College, and of Chemistry and Natural Philosophy in the Hampden Sydney College, Virginia, Corresponding Member of the Lyceum of Natural History, New-York, etc. etc. Philadelphia: Lea & Blanchard, 1848. 12mo. pp. 396.

The cause which necessitated the production of this manual was, we are informed by the author, the " absence of a book which directs the attention of the novice to the intimate connections between this science and medicine,—something which may interest his mind in the subject of chemistry, by pointing out its relations to physiology, therapeutics and practice." It makes no pretensions to originality, and claims to be a manual which may serve as an introduction to more elaborate essays, and presents to its readers a concise view of the facts collected by the late researches of the German and French chemists,—researches which have in some measure been unappreciated among us, from the want of chemical knowledge and the apparent difficulty of acquiring it." The work is divided into five parts. Part I. TheC hemical Forces embracing the subjects of *Heat, Light, Electricity, Galvanism, Animal Galvanism and Affinity.* Part II. The simple bodies of the greatest importance, comprising *Oxygen, Hydrogen, Nitrogen and Sulphur.* The Haloid Elements, consisting of *Chlorine, Iodine, Bromine and Fluorine.* The Phosphorus Group, including *Phosphorus, Arsenic, Antimony, Carbon, Boron and Silicon.* Part III. Organic Chemistry. Part IV. Animal Chemistry, which treats of *Digestion, the Blood, the Capillary Force,* *the Urine, Nervous Matter, Bone, Hair, Horn, &c.* Part V. The Metals. It is illustrated with a sufficient number of plates to render the description of the work clear, and from the perusal which the short time we have been able to devote to it has permitted, we are of the opinion that it is admirably adapted to the end designed. We shall be much disappointed if it is not adopted as a text-book in all our American colleges.

ART. XIII.—*The Half-yearly Abstract of the Medical Sciences.* Being a Practical and Analytical Digest of the Contents of the Principal British and Continental Medical Works published in the preceding six months. Together with a Series of Critical Reports on the Progress of Medicine and the Collateral Sciences, during the same period. Edited by W. H. RANKING, M. D., Cantab., etc., etc. No. 7. January to June, 1848. Philadelphia: Lindsay & Blakiston. 8vo. pp. 358.

The Retrospect of Practical Medicine and Surgery. Being a Half-yearly Journal, containing a Retrospective View of every Discovery and Practical Improvement in the Medical Sciences. Edited by W. BRAITHWAITE, Surgeon to the Leeds Eye and Ear Infirmary, and Lecturer on Midwifery, and the Diseases of Women and Children, in the Leeds School of Medicine. No. 17. January to July, 1848. New-York: Daniel Adee, 1848. 8vo. pp. 355.

WOOD's *Quarterly Retrospect of American and Foreign Practical Medicine and Surgery.* No. 5. July, 1848. New-York: R. & G. S. WOOD. 8vo. pp. 64.

These works continue to maintain their well-earned and merited popularity. We believe they receive at the hands of the physicians of our country a liberal and extended patronage. The numbers before us are filled with choice and practical matter—which, to the same extent, is nowhere else available to a majority of the members of the profession.

PART THIRD.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

Proceedings of the Third Meeting of the Association of Medical Superintendents of American Institutions for the Insane.

To the Editor of the New-York Journal of Medicine, &c.

Dear Sir,—In compliance with a resolution of the Association of Medical Superintendents of American Institutions for the Insane, I enclose an abstract of the proceedings of their late meeting.

Very respectfully, yours, &c.,

June 16th, 1848. Thomas S. Kirkbride, *Sec.*

The Association of Medical Superintendents of American Institutions for the Insane, commenced its third meeting at the Astor House in the city of New-York, on the 8th of May, 1848, the Vice-President, William M. Awl, M. D., in the chair, and Thomas S. Kirkbride, M. D., Secretary.

Present—Dr. James Bates, of the Marine Insane Hospital at Augusta; Dr. Andrew McFarland, of the New-Hampshire State Hospital at Concord; Dr. Wm. H. Rockwell, of the Vermont State Hospital at Brattleboro'; Dr. Luther V. Bell, of the McLean Asylum for the Insane at Somerville, Mass.; Dr. C. H. Stedman, of the Boston Lunatic Asylum; Dr. N. Cutter, of the Private Institution at Pepperill, Mass.; Dr. John S. Butler, of the Connecticut Retreat at Hartford; Dr. Amariah Brigham, of the State Lunatic Asylum at Utica, N. Y.; Dr. Pliny Earle, of the Bloomingdale Asylum at New-York; Dr. James Macdonald, of the Private Institution at Flushing, L. I.; Dr. M. H. Ranney, of the Lunatic Asylum on Blackwell's Island, New-York; Dr. G. H. White, of the Hudson (private) Lunatic Asylum, N. Y.; Dr. Horace A. Buttolph, of the New-Jersey Lunatic Asylum at Trenton; Dr. Thomas S. Kirkbride, of the Pennsylvania Hospital for the Insane at Philadelphia; Dr. Joshua H. Worthington, of the Friends' Asylum at Frankford, Pa.; Dr. N. C. Benedict, of the Blockley Insane Asylum at Philadelphia: Dr. Fonerden, of the Maryland Hospital at Baltimore; Dr. Wm. M. Awl, of the Ohio Lunatic Asylum at Columbus; Dr. John M. Galt, of the Eastern Asylum of Virginia at Williamsburg; and Dr. John R. Allan, of the Kentucky Lunatic Asylum at Lexington.

Dr. Samuel B. Woodward tendered his resignation of the Presidency of the Association, which was accepted, and Dr. Wm. M. Awl was elected President in the place of Dr. Woodward, resigned; and Dr. A. Brigham, Vice-President, in the place of Dr. Awl, elected President. The following preamble and resolutions in reference to its late President, were unanimously adopted by the Association, viz.:

WHEREAS, Dr. Samuel B. Woodward, at the present meeting of this Association, has tendered his resignation as President thereof—

Resolved, That whilst accepting this resignation, we cannot adjourn without declaring our high sense of the services of Dr. Woodward as President of this body, and also our full appreciation of his ardent and useful exertions for so many years in behalf of the unfortunate insane.

Resolved, That the Secretary of the Association be requested to transmit to Dr. Woodward a copy of this resolution.

Agreeably to appointment, Dr. Brigham read an obituary notice of the late Dr. White, of the Hudson Lunatic Asylum and the first Vice-President of this Association, which was directed to be entered upon the minutes.

Dr. A. V. Williams and Dr. Benjamin Ogden, two of the visiting physicians of the Asylum on Blackwell's Island, were invited to attend the sittings of the Association; and a resolution was adopted, authorizing each member to invite any person interested in its discussions.

In conformity with a resolution, adopted at the last meeting of the Association, Drs. Brigham and Macdonald made written, and Drs. Earle, Rockwell, Bates, Butler, Allan and Kirkbride, verbal reports on the subjects of post-mortem examinations and the pathology of insanity, which, after consideration, were referred to the standing committee on these subjects.

Dr. Kirkbride read a report from the committee on publication, which was accepted, and the Association subsequently resolved, That the committee on publication, appointed at the last meeting, be continued, and instructed to publish such of the reports and such parts of the reports made to this Association, and such parts of its proceedings as they shall deem conducive to the public good.

Elevations and ground-plans of many of the institutions for the insane in the United States and Canada were laid upon the table, for examination by the members of the Association;—also a great variety of carving and fancy work made by patients in the New-York State Asylum,—and a number of ingenious buckles and other improved fixtures, intended to be employed on restraining apparatus, and sent to the Association by the maker, John D. Fisher of Philadelphia.

Written reports were made on the following subjects, and after full discussion accepted, and laid upon the table, subject to future disposition by the Association, viz.—

On the comparative value of the different kinds of labor for patients, and the best means of employment in winter, by Dr. Rockwell; on the advantages and disadvantages of cottages for wealthy patients, adjacent to hospitals for the insane, by Dr. Kirkbride; on the relative value of the different kinds of fuel, for heating hospitals, by Dr. Bates; on the most economical mode of treating the insane of the poorer classes, by Dr. McFarland; on reading, recreations and amusements for the insane, by Dr. Galt; on the comparative value of treatment in public institutions, and private practice, by Dr. White; and on the effects on the insane, of the use of tobacco, by Dr. Cutter.

Remarks on the diseases and causes of death among the insane, were also read by Dr. Macdonald; on the statistics of insanity, by Dr. Earle; and a series of cases of manio-a-potu, treated by the inhalation of ether, in the Boston City Hospital, by Dr. Stedman.

Invitations were received and accepted, to visit the Bloomingdale Asylum, under the care of Dr. Earle, and the private Institution at Flushing, L. I., under the care of Dr. Macdonald; and both institutions were subsequently visited, and examined with great satisfaction, and the thanks of the Association tendered to these gentlemen for their courtesy, attention and bountiful hospitality.

The Association also accepted an invitation to visit the Asylum on Blackwell's Island, and after a thorough examination of the buildings and arrangements, unanimously adopted the following resolutions.

Resolutions respecting the Receptacle for Pauper-lunatics at Blackwell's Island.

The "Association of Medical Superintendents of the American Institutions for the Insane," holding their third biennial meeting in this city, have availed themselves of the kind invitation of the civil authorities superintending the receptacle for the pauper lunatics of this great metropolis, at Blackwell's Island, to visit and examine the unfortunate class there resident, and the provision made for their care, their amelioration, and their recovery.

It would be far more grateful to their feelings, could they leave this, as they do the other asylums for the insane, in this vicinity, which they have also examined, in silent but respectful regard at seeing great objects properly accomplished. In so doing, they would escape the unpleasant necessity of instituting painful criticisms in the face of personal civilities, and the hazard of being considered, by the unreflecting, as guilty of improper interference in the affairs of a community not their own.

Devoted as most of them have been for many long years of their lives to the care and restoration of those deprived of reason; familiar, as many of them have been from personal examination, with the condition of this class of sufferers under the varying circumstances of the different communities of the old and new world; looking upon themselves, while citizens of widely separated states, yet common denizens of that republic of humanity that knows no state lines, they willingly venture all risk of being misunderstood and misrepresented, when they declare their conviction, that the arrangements for the three or four hundred pauper lunatics of this city are far in the rear of the age, of the standard of other regions equally advanced in civilization and refinement, of the imperative demands of common justice, humanity and respect due to the image of a common Father, however much disfigured and changed.

They would, therefore, appeal to the authorities of this mighty and opulent metropolis of the western world, to sustain the honor of their leading position; to those who must feel that they and their children have no immunity against loss of property, of friends, and of reason, to those who recognize the obligations imposed by their own elevation and success to protect the friendless and miserable, to interpose their determined resolution no longer to permit the Empire City to stand below the demands of the age, in the justice, humanity, yea, in the common decency, with which those guilty of no crime, but stricken by the hand of Providence in the loss of reason, are treated. Suffer no longer, we implore you, those whose sensibilities are not extinguished, but may even be more intense, whose honest self-respect and pride of character is not always permanently obliterated, whose return to society and to usefulness is not elsewhere the rare exception, but the expected result; to be abandoned to the tender mercies of thieves and prostitutes, who are to a considerable extent, the associates and keepers of this helpless charge, and clothed with all the delegated authority and influence, which such a relation necessarily implies.

This association has neither the means nor disposition to inquire why the pauper lunatics of this community should have been allowed to lapse into that depth of degradation and neglect, of which it would be difficult elsewhere to find a parallel.

Enough is it for them to know, that such is the fact, notwithstanding plans and designs for every modern architectural requirement, as well as curative and ameliorating appliances, have been long in the hands, and subjected to the favorable criticism and comparison of those elsewhere charged with the same duties, and have been recognized as fully adequate to meet the exigency.

They have examined the recent report of the medical visitors, and conclude with them fully in their conclusions, as to the necessity of an entire change in the system; in the impossibility of doing all that justice, humanity, and a sound economy require for the insane, except at a cost of money sufficient to provide faithful, competent, respectable assistants or keepers, and adequate means of classification, inspection, labor, amusement, ventillation, and cleanliness. They believe a just economy requires the abandonment, or conversion to collateral uses merely, of those miserable apologies for insane hospitals, known as the old and the new *madhouses;* and that if the island is retained as a site for these institutions, the original design fully satisfactory in its great outlines and principles, should at once be carried out to completion.

The following preamble and resolution were adopted by the Association, viz:

WHEREAS, in the selection of medical superintendents to American institutions for the insane, it is important to choose men with the highest qualifications, both as respects professional acquirements and moral endowments, therefore,

Resolved, That any attempt in any part of this country, to select such officers through political bias, be deprecated by this Association as a dangerous departure from that sound rule which should govern every appointing power, of seeking the best men, irrespective of every other consideration.

The following resolutions were also adopted during the different sessions of the Association:

Resolved, That a committee be appointed to report to this Association, at its next meeting, the best terms for the classification and designations of the different forms of insanity, and also the best anatomical and pathological terms for the various parts of the brain, and a nomenclature of the diseases which prove fatal to the insane.

Resolved, That a committee be appointed to suggest the best plan of calling the attention of physicians in general practice to the proper treatment of the insane at their homes, and especially to their treatment during the first period of their disease.

Resolved, That the members of this Association be requested to prepare and present to a future meeting, a statistical analysis of all the cases of insanity which have been admitted into the different institutions under their care.

Resolved, That all subjects heretofore referred to committees and not reported on at this meeting of the Association, be continued in the hands of the present committees for future action.

Resolved, That a committee be appointed who shall, either before or after our adjournment, select subjects and appoint members to report on the same, in writing, at the next meeting of the Association.

Resolved, That previous to the future meetings of the Association the secretary be requested to invite the Boards of Trustees, managers, or official visitors of each insane asylum on this continent, to attend the sessions of this body.

Resolved, That the thanks of this Association be tendered to Messrs. Coleman & Stetson, of the Astor House, for their very liberal provision for the meetings of the Association, and for which, on account of its benevolent objects, they have declined receiving compensation.

Resolved, That the thanks of the Association be tendered to the officers for the able manner in which they have performed the duties of their respective stations.

Resolved, That the Secretary be instructed to furnish an abstract of the proceedings of the Association to the editor of the American Journal of Insanity, and to the editors of the various Medical Journals in the United States, for publication in their respective periodicals.

The Association continued its sessions until the afternoon of the 12th of May, and then adjourned to meet in the city of Utica, N. Y., on the third Monday of May, 1849, at 10 o'clock, A. M.

By order of the Association,

THOMAS S. KIRKBRIDE, *Secretary.*

Medical Society of the State of New-York.—At the last meeting of our State Society, a committee, consisting of Drs. T. Blatchford, T. R. Beck and J. A. Wing, was appointed, "to prepare and distribute a circular to the county medical societies, recommending such measures as in their judgment may be best calculated to advance the interests of the several societies and the medical profession." To the following suggestions, the committee are desirous of calling the attention of the members of the county medical societies.

1. In the first place, we earnestly invite you to the adoption of the code of Medical Ethics, prepared and sanctioned by the authority of the National Medical Convention. Our State has the honor, through the agency of the late Dr. Pascalis, of first bringing this subject to the immediate notice of the profession, but we readily and cheerfully state, that the present code is greatly improved and highly worthy of adoption by all physicians who desire to live and act as gentlemen, men of high morals and liberal education.

2. We are extremely anxious that the meetings of the County Medical Societies should be faithfully kept up and numerously attended. Although the profession is no longer under the special protection of the law, it still has the power within itself, to cause it to be respected and honored, provided its members be true to themselves. Instead then of being merely an executive body, we trust that each and all will devote themselves to the communication and diffusion of medical knowledge—to the cultivation of friendly intercourse, and to the establishment of a character for intelligence and high-minded courtesy.

3. As the State Medical Society is dependent for its utility and advancement, on the attendance of the members (delegates and others) at its annual meeting, we are extremely anxious that the meeting should be as numerous as possible, and characterized by an almost exclusive attention to medical science. There is nothing to prevent all and every practitioner in the State, from taking a part in its proceedings, and we trust that when it is once understood, that the communication of information, either verbal or written, on the various branches of study in our Profession, is to form the main subject of our attention, such attendance will be greatly increased. The proceedings will hereafter be regularly recorded by a professional reporter. We respecfully invite all County Medical Societies, as well as their individual members, to forward everything of interest for publication.

4. Another subject referred to our consideration, and on which we were instructed to address you, is the power of the Medical Society to suspend or expel members for violations of the by-laws or breaches of medical ethics. We are of the opinion that the societies possess the power, and in confirmation, refer to the opinions of Attorney Generals Bronson and Barker, (*Transactions State Medical Society*, vol. 4, Appendix, page 23, and vol. 6, Appendix, page 101) But we recommend, that in those painful cases which would seem to need such measures, steps be first taken to request the unworthy member to withdraw himself voluntarily. Certainly he cannot desire to belong to a society whose rules and regulations he is violating.

5. The committee next approach a subject, on which they feel an abiding and solemn conviction, that the future welfare and respectability of the Profession must mainly rest. It is the education of pupils, preliminary to entering on the study of medicine. They are convinced, that unless this be made a subject of more special attention by practitioners, all other efforts will be comparatively futile. It is probably in vain to expect that the Legislature will make an enactment to meet this necessity. Those who, in former years, resisted the passage of such laws, and many of whom were of the legal profession, have lived to see all the requisites then demanded of them, also broken down, and we cannot conceal that the retribution is just. But the medical profession, at least, have the power within themselves of repairing the evil, if they will steadily refuse to take any young man as a student, who is not

well grounded in a knowledge of, and in writing the English language, and who has at least some elementary knowledge of Latin and mathematics—one, in fact, who has received such an education as may be readily attained at any of the academies which are scattered broad-cast over the State. It is impossible otherwise that a student can materially profit by medical instruction—that he can understand what he reads, or appreciate what he hears. A good education is indispensable to progress in any department of professional life. If successful, it is gained sooner or latter, and it is needless to add, that in the latter case, its acquisition must be laborious, irksome, and disheartening. We ask the cordial co-operation of all physicians in this important matter.

6. The undersigned are convinced from the experience of years, that the increase of Medical Colleges throughout the Union, has not been conducive to the promotion of medical knowledge, however much they may have aided in its diffusion. It is in vain, however, to attempt an alteration in what would now seem to be a fixed rule, viz., that every State must sooner or later have a Medical College of its own, and every large city one or more. The tendency of such an increase unfortunately is to lower the standard of medical instruction, unless great regard be had to the time devoted to it, and to the proper proofs of its sufficient acquisition. Physicians can do much to check this, by denouncing individual cases of disregard of the rules and regulations for graduation, which nominally are the same throughout the United States, but which, there is too much reason to fear, are often practically disregarded. Until this be done, there will be but little accomplished by arraying the profession against the colleges generally, or requiring the latter to enlarge their labors, with an intimate conviction that a portion at least will disregard the advice and profit by the disregard.

7. We know of no medium of intercourse between the members of our profession in the State, more appropriate, and at the same time more economical, than the transactions as at present published. If the societies and physicians generally will each contribute but a small sum annually, a sufficient number can be struck off, to supply every medical man. And the State Society is prepared to act as agent for this purpose at cost price.

Asking your candid and deliberate attention to the above,

We remain respectfully,

Your obedient servants,

THOMAS W. BLATCHFORD,
T. ROMEYN BECK, } *Committee.*
JOEL A. WING,

ANATOMY AND PHYSIOLOGY.

ABNORMAL DISTRIBUTION OF THE THYROID ARTERIES.—Prof. James Blake describes in the *St. Louis Med. and Surg. Journ.* (June, 1848), the following case of abnormal distribution of the thyroid arteries, which is interesting from the circumstance that in the subject in which it occurred, neither the operation of tracheotomy nor laryngotomy could have been performed without great danger of sacrificing the life of the individual. The subject in which it occurred, was a male about forty years of age, brought into the dissecting room of the St. Louis University during the past session. The first anomaly that presented itself on dissecting the arteries going to the head and neck, was that of a considerable artery about the size of a quill, arising from the anterior and superior part of the innominata, passing upwards and crossing the trachea about three-quarters of an inch above the sternum. After proceeding about two lines beyond the mesial line, it again turned to the right and crossed the mesial line about a quarter of an inch before the isthmus of the thyroid body, and proceeded to divide into branches along its lower edge on the right side.

On dissecting the superior thyroid arteries, it was found that the artery of the right side arose from the external carotid, at the place where it is generally found; but here it was seen to be much larger than usual; it proceeded downward to the upper and outer angle of the thyroid body, but instead of dividing into its terminal branches, as it generally does, it turned forwards and to the left, running along the upper edge of the cricoid cartilage, or between it and the thyroid cartilage, and lying on the crico-thyroid muscle; it continued this course until it passed rather beyond the mesial line, crossing the crico-thyroid ligament. During its course, it sent branches downwards to the upper edge of the right side of the thyroid body, and the isthmus and its terminal branches were distributed to the left lobe of the thyroid body. The artery where it crossed the crico-thyroid ligament was as large as a crow-quill; there was no large anastomotic branch uniting with the superior thyroid artery of the opposite side, which was rather smaller than natural. The inferior thyroid arteries were natural, but that of the right side rather larger. The thyroid body was rather above the natural size, and somewhat more dense in its structure, and less red than it is generally found—the isthmus was broad, extending as far as the lower edge of the cricoid cartilage. From the above description it is evident that neither the operation of tracheotomy nor laryngotomy could have been performed in this subject without incurring the greatest risk of wounding an artery, the bleeding from which might, under the circumstances, even have led to a fatal result.—*Amer. Jour. Med. Sci.*

CORPORA MENSTRUALIA,—*A case in which this body was found in Process of Formation, coinciding with Menstruation.*—(*Charleston Med. Jour. and Rev.*, Jan. 1848.)—Dr. Myddleton Michel has recently published an article "*On the Dependence of Menstruation upon the Development and Expulsion of Ova,*" from which we abstract the following case.

The subject was a woman convicted of murder, and executed on the 16th of September, 1847. A post-mortem examination was made by Drs. Gaillard, De Saussure and Cain, in the presence of Dr. Michel, who requested that the internal organs of generation should be closely inspected. Dr. M. gives the following particulars of the result of that inspection, together with his opinion on the same.

Upon the removal of the uterus and its appendages, we remarked that there was no perceptible increase of size in the parts, though evident signs of congestion were detected, particularly in the tubes. The mouth of the uterus was slightly opened, tumefied and its orifice dripping with blood. A vertical incision being made through the organ, the internal surface was found coated with blood, though the congestion of its mucous lining membrane was particularly confined to the upper part, about the entrance of the tubes. The stroma of the ovary of the right side presented a number of vesicles working their way towards the surface, and on the surface one or more vesicles, in progress of development, containing a quantity of clear fluid which was ejected with much force as they were opened. In the ovary of the left side several others were also present, but on the anterior surface we discovered a ruptured graafian vesicle, whose orifice was partially closed by a clot of blood. This was evidently the one which had just discharged its ovulum. But being unprovided with proper instruments, by the mutual suggestion of Dr. Gaillard and myself, I took this rare specimen with me to examine it carefully.

I apprehend I can clearly establish, from the condition in which I found the vesicle, that Jane was not pregnant, and that menstruation had only began a day or two. She was incarcerated some weeks previous to her execution, and her anxiety and suspense before she was apprehended, inclines one to believe that her every thonght must for some time have been directed to her approaching fate. But a better argument is furnished by the vesicle in question, for its rupture had positively just occurred, and here are the proofs: the opened vesicle was only partly closed by a clot of blood; the granular membrane surrounded this, even protruding through the opening. Under the microscope a fragment of this membrane exhibited its usual appearance of little hexagons arranged like mosaic work. I called the attention of Drs. R. Motte and Hunt to this membrane, who were present when I examined it. Cutting through the vesicle, I found its large cavity filled with the clotted blood which is the immediate cause of its rupture, and removing this coagulum, the inner tunic displayed great vascularity, its vessels ramifying over its surface like the artery on the retina. This membrane was not yet folding to constitute the corpus luteum.

To those acquainted with the subject, it will be plain that rupture had recently occurred, and consequently that the ovum had not long escaped. I therefore diligently searched for the egg, knowing that if discovered, this would be the only case of the kind recorded. I was not fortunate in the attempt; the egg was in the tubes, but these were so corrugated, (a condition in which all the other organs of like structure participated as perhaps the result of strangulation,) that it was impossible to open them. The surface of the uterus was then carefully inspected with a strong lens, but nothing was discovered. The mucous membrane was not hypertrophied, neither was the uterine crypts nor glands visible as I have seen during this period. I therefore conclude from this point, associated with the fact of the congestion being greatest at the entrance of the tubes, that menstruation had just commenced, and finally that this excitement commences in the ovaries, passes next to the tubes, and then encroaches upon the surface of the uterus. This last remark perhaps is worthy of notice, as I believe it has never been expressed.

—

ON THE CEREBRO-SPINAL FLUID.—(*Charleston Med. Jour. and Rev.*) Dr. M. Michel has in a recent paper "*On the effects consequent upon the section of the posterior muscles of the neck, with a short history of this fluid,*" questioned the views of M. Magendie. It will be remembered that in 1825, in the fifth volume of the Journal de Physiologie, M. Magendie published his memoir on this subject. The views which he there maintains are as follows, viz.: 1st. That he had discovered the presence of a fluid situated immediately beneath the arachnoid membrane and covering the brain and spinal cord. 2d. That upon the presence of this fluid depended the integrity of the cerebro-spinal axis, and the actions dependent upon it. 3d. That the evacuation of this fluid by incising the soft parts across the posterior occipito-atloidal region and puncturing the membranes is followed by the greatest possible disturbance of station and progression. 4th. That the object of this fluid is the maintenance of a due and uniform pressure upon the entire nervous centre, whereby the regular movements of the animal may be effected. Since that period the experiments of M. Magendie have been frequently repeated and their repitition has tended to confirm his views. In 1845, M. Longet, assisted by Dr. Michel, "discovered that the abstraction of the sub-arachnoid fluid exerted not the slightest influence over the order of motion, and that the remarkable physiological effects observed, were not to be ascribed to the removal of any pressure, but to the sudden occurrence of unaccustomed compression." The experiments from which these deductions were drawn, consisted in the division of the posterior muscles of the neck, including all the soft parts, and particularly the lesser recti muscles, (care being taken not to injure the protective envelopes of the cord or fluid within.) On doing this, the animal's head drops powerless over the chest, at first moves forward with a degree of caution evincing the insecurity of his movements, when, upon being aroused to a sense of any impending danger, he totters, staggers and falls, soon to pass into an oblivious calm or lethargy, from which, however, he recovers after a lapse of a few hours, regaining control of every voluntary act. This latter effect has (our readers will remember) always followed the abstraction of the cephalo-rachidian fluid, and the experimenters sought an explanation of the restoration of equilibrium in the rapid secretion of the fluid. It was these facts which led M. Longet and Dr. Michel to question the correctness of the conclusions of M. Magendie. Their plan of proceeding after this, and the results which followed, were as follows:

Making a narrower incision over the middle dorsal vertebra, and removing the arch, the membranes were opened, and the liquid drawn off; the animal abandoned to itself, was now able to direct its voluntary motions, and walked well, with the exception of a tendency to drag his hind quarters, owing to weakness produced by the wound. In addition to the liquid thus obtained, a much larger quantity was removed by momentarily interrupting the animal's respiration, though it might still be objected that sufficient remained to account for the non-appearance of the expected results; therefore, an ingenious experiment was contrived, whose object was to extract the liquid at the point of elevation, that is, between the occiput and atlas, and yet to isolate entirely the effects from those brought about by the section of the muscles. This was effected, first, by making the sections as usual, and witnessing the disturbances which followed, and on the next day when the animal had completely recovered from its effects, opening the envelopes of the spinal cord by a large incision and evacuating all the fluid; after this additional procedure, however, no perceptible difference was noticed, the animal continuing perfect master of its movements. This then was the desired proof, exhibiting the egregious error of prevalent opinions on this point.

It remained to confirm these observations on other animals beside the dog, accordingly they continued their experiments on the cat, sheep, rabbit, guinea-pig and horse; on numerous birds, also, but on none of them are these results induced, unless it may be among the large and heavy bills—ducks, &c. On reptiles, whose long diameter of the head is situated almost in the same plane with the vertebral column, Dr. M. discovered no marked variance of motion, a circumstance which he afterwards attributes to the extreme shortness of the neck, which forms a supporting cushion to the head, and which did not fall pendent after the section. As to the cause of the phenomena which followed these experiments Dr. Michel remarks:

"It cannot be regarded as a loss of equilibrium, occasioned by the pendent position which the head immediately assumes. This was my first suggestion to M. Longet, upon witnessing the occurrence, but he answered by the objection, that animals whose heads were forcibly bent forwards over the sternum, and retained in that position by bandages, were able to move about as usual. We also know that if a dog's leg be cut off or paralyzed, the animal will immediately recover its equilibrium, by placing itself in a somewhat different position. This fact is again illustrated in dogs, after securing the aorta at its lower part: their hind legs become entirely paralyzed, and they instantly place themselves in a most remarkable attitude, which consists in walking on their front legs, with their hind quarters turned up into the air. Nor are these phenomena connected, in any way, with disturbance in the focal distance of the eyes, from a relative change of position of the head, as I also supposed; for no variation in the size of the pupil was recognised, among many other objections which might be advanced. The explanation on the contrary, is found in the sudden and violent compression of the medulla oblongata, occasioned by a separation of the occiput and atlas; and this pressure takes place just at the point of junction of the peduncles of the cerebellum, interrupting all transmission of its dictates to the cord, and from thence to the muscles under its direction. That this is the correct interpretation, is proved from the discovery, that co-ordination could be restored by raising the head and supporting it in the normal position. The sheep immediately recovered the power of controlling its movements upon my raising its head; the perturbations returning so soon as its head was allowed to fall. On M. Longet's adjusting an apparatus which supported the head, a cat was again experimented on, without a repetition of the usual disturbances. M. Longet further remarked that these unexpected results were in every respect similar to those occasioned by any other compression at the same point in the nervous centre. For example, after the section of the trifacial nerve, behind the gasserian ganglion, it often happens that the point of the knife enters the sinus; the blood which is then effused, compressing the pons, crura cerebelli and medulla oblongata induces the same incapacity to move; the animal rolls over, cannot stand and is drowsy for some time before it recovers; and when such has been its good luck, is again able to resume command of its movements. The recovery from these effects shows the readiness with which the nervous centres become accustomed to any constant pressure; for when this was greatest, in many of our experiments the effects wore off after thirty-six hours."

From these experiments Dr. Michel concludes that the perturbations of motion are not due to the abstraction of the cerebra-spinal fluid, but to the pressure upon the cephalic extremity of the spinal marrow; and the re-establishment of a due balance of motion depends upon the promptness with which the nervous centre becomes habituated to the pressure, and not upon the supposed reproduction of the fluid, and further that these actions bear a strong resemblance to those produced by lesions of the cerebellum owing to pressure upon the crura cerebelli, if we admit the functions of the portion of the encephalon to be such as are advanced by M. Flourens.

PATHOLOGY AND PRACTICAL MEDICINE.

PATHOLOGY OF THE BLOOD IN INEBRIATES. (*Boston Med. & Surg. Jour. for May.*)—A Mr. Thompson, of South Berwick, Maine, aged 35 years, for a long time had been the subject of intemperate habits, being daily accustomed to the use of alcoholic drinks; for five days previous to the examination of the blood, he had been in a beastly state of intoxication; and it was found upon inquiry that he had drank in that time *two gallons* of "West India Rum." At the expiration of the fifth day he called upon Dr. J. C. Hanson, and complained of the usual symptoms of drunkenness. Dr. H. immediately for experiment, sake drew blood from the arm; it was found destitute in a measure of its watery elements. On applying a lighted taper to it, it began to burn with a flame similar to alcohol. Dr. Jewett, and several respectable citizens of South Berwick, were eye witnesses to the experiment. Dr. Pray of Boston, who reports the case, appends the following remarks: It is well known to the medical profession, that liquids, and even mineral and vegetable substances, taken into the stomach, are shortly found in different parts of the system. Madder, for instance, when internally administered, imparts a like color to the milk, and urine, and to the bones of animals, without materially affecting the healthy action of any tissue, or sensibly deranging the constituent parts of the solids or fluids, unless too long persevered in. But there are very few known cases in which so much alcohol has been absorbed into the system, as to change the chemical qualities of the blood, or so modify it, that its watery proportions should give place to the fluid which has been immoderately indulged in. The case which we have briefly narrated plainly shows that such may be the fact.

DISSECTION OF A FUNGUS HÆMATODES OCULI. By W. CLAY WALLACE, M. D. (*American Jour of the Med. Sci.*)—To harden the tumor before examination, it was macerated in an alcoholic solution of corrosive sublimate, and after repeated washings it was again macerated in a solution of chloride of zinc. On separating the fissures at the apex, a number of small reddish stems similar to those supporting the minute flowers of a cauliflower, were seen to arise from the mass and support some of the crusts of the fungus. The tumor was opened midway between the apex and the optic nerve, and the encephaloid matter scraped away until the specimen was considerably injured before observing the principal stem.

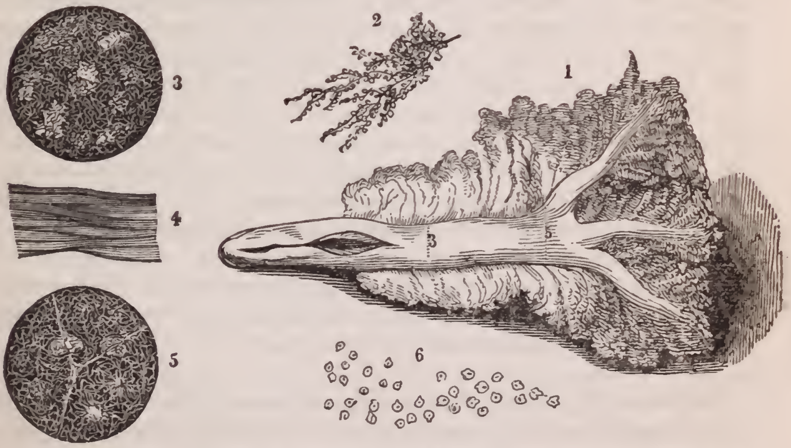


Fig. 1 represents the tumor as it appeared after the removal of a portion of the encephaloid matter. The principal stem or trunk was firm as tendon, and hollow when opened longitudinally. At nearly two inches from its origin, the trunk divided into several branches, from which, and from the trunk itself, the medullary matter proceeded. When the latter was examined with a microscope, it was found to consist of a series of fibres and granules, as represented at fig. 2. Some of the granules (fig. 6), which had fallen to the bottom of the fluid in which the preparation was immersed, exhibited on the application of a higher magnifying power, nuclei and irregular extremities by which they had probably been attached to the fibres. Fig. 3 is a magnified view of a transverse section of the stem at 3 in the first figure. Fig. 5 is a similar section at 5, where it is divided. Fig. 4 is a magnified longitudinal segment.

The appearance of the preparation, which I still possess, favors the opinion that fungus hæmatodes belongs to the class of parasites, as advanced by Kluge and Meyen, who have endeavored to show that the encephaloid tumor possesses a vascular system of its own.

It has been observed the fungus was mutilated during the examination; this account will, therefore, be regarded as a very imperfect contribution to the pathology of this deplorable disease.

AZOTURIA.—Prof. Flint (*Buffalo Medical Journal for July*) has presented some of the particulars of a case of this very rare disease. The patient, a German laborer, had suffered for some time from indefinite ailments, such as indigestion, palpitation, neuralgia, pains in the chest, etc.—he has constantly wasted in flesh. On examination of the urine, the specific gravity of the first specimen was found to be 1.030. It deposited no sediment, resembled porter in color, and emitted a very strong urinous odor. On placing a portion in a test glass, and adding an equal quantity of nitric acid, two thirds of the mass became solidified in about thirty minutes. The solid mass presented an appearance of minute crystals, (nitrate of urea)—the same results followed several repetitions of the experiment.

Some time after, a second specimen was examined—it contained a mucous deposit, at first white, but which soon became red. On agitating the urine, the sediment disappeared, and the urine became somewhat turbid. Its specific gravity was the same as before, and the like results followed the addition of nitric acid. Dr. Prout, in his extensive experience in urinary disorders, has met with but a few cases of this disease; diabetes mellitus is a rare disease, and yet he has seen twenty cases of the latter to one of the former affection. Dr. Flint with Dr. Prout believes that azoturia involves mal-assimilation, or disorder of the molecular changes incident to nutrition, of which the increased quantity of urea in the urine is a secondary result. And emaciation must necessarily ensue as a consequence of its continuance. Dr. P. believes that in some cases, azoturia precedes diabetes mellitus. It has been supposed that neuralgic pains, palpitations, etc., in these cases, are due to the presence of urea in the circulating fluid, acting on the nervous system. This patient has derived considerable benefit from the use of a tonic anodyne course of treatment, such as Dr. Prout places most reliance upon.

ECZEMA OF THE SCALP—*Treatment of, in Infants.*—Dr. Bulkley, in a clinical lecture on diseases of the skin, published in the Annalist, in June last, speaks of the treatment of this affection as follows:

> The treatment must depend upon the cause, so far as this can be ascertained, and the general condition of the little patient. When occurring in those of marked strumous diathesis, which predisposes very strongly to it, the indication for general treatment is plain. Remedies to correct, as far as possible, this condition of the system, and especially well directed hygienic means, must be diligently used. In all cases, the gums must be watched, and lanced, if necessary, and the secretions and discharges from the bowels attended to. Arsenic and bichloride of mercury are given in these cases by some; but I have no personal experience in their use. Iodine and sarsaparilla are also used. The former article, if carefully managed, may do good in appropriate cases, but may aggravate the difficulty by causing irritation of the mucous membrane of the stomach and bowels, while the quantity of the sac-

charine matter usually employed as the vehicle for the latter, is apt to derange digestion; besides, that a large proportion of the trash palmed off upon the public under this name, has probably but little, if any, medicinal effect beyond what it often receives from the drugs combined with it, and which sometimes do positive harm. Locally, I am in the habit of directing the application of a poultice to remove the scabs, if there is any accumulation; but care must be taken not to continue the use of these too long, especially in feeble children of a strumous diathesis, as they sometimes cause a secretion from the surface so abundant as to exhaust the strength of the patient. When the scalp is much inflamed, frequent ablutions with some emollient decoction (one of the most convenient and economical of which is that of wheat-bran), or the application of a soft cloth, wet with a weak solution of acetate of lead, will be found of service: afterwards, especially if the surface is relaxed, and there is a tendency to constant exudation, weak astringent washes, or astringent or mildly stimulating ointments, may be applied with care to limited surfaces at a time, when the disease is extensive. Particular care must always be taken to avoid every application which will cause irritation. An oil-silk cap is sometimes of use when there is little or no secretion and the skin is torpid, but has usually not been borne in my experience in these cases.

ANTHROPO-TOXICOLOGIA, *or man-poison*, (from *anthropos*, man, and *toxicon*, poison.)—Under this heading, Dr. C. E. Lavender has reported in the New Orleans Med. & Surg. Jour. for July, the history of three cases which tend to show, "that the secretions or exhalations from some human beings in health, are so virulent and noxious as to cause disease in other healthy persons." The particulars of these cases are as follows: Mr. —— is a man whose cutaneous secretions, especially under excitement, are exceeding offensive and disgusting. He has been the husband of two wives; these two women were at the time of marriage in the prime of life, aged 25, in robust health, of good constitution, and of active, healthful habits. Soon after they came in contact with this man, they began to exhibit the effects of morbific causes. They both became leucophlegmatic, and continued constantly and steadily to decline. The same optic illusions, dimness of vision and perversion of colors, marked the progress of both cases to a fatal termination, in these consists the anthropological facts. The toxicological symptoms in each were the constant and gradual emaciation and waste of vitality, without any apparent fixed disease; the optic illusions, especially the fact of *light appearing scarlet, and white red*, the coincidence of the symptoms under similar circumstances, and the fatal termination. Dr. L. mentions a similar case which in its rise, progress, diagnostic symptoms and results agreed perfectly with the foregoing. In speaking of this case he says:

> Persons whose bodies, in a state of health, are capable of elaborating infection, as far as my observation extends, are distinguished by the strong and peculiarly offensive character of their pulmonary and cutaneous exhalations. Although this may not always be the case, yet so signally is it true in the cases before us, that I have heard sensible men say that, in their opinion, it would cause disease in any person who would room with them. I therefore set this morbific agent down in the catalogue of animal poisons, as human infection *sui generis*. What its nature, its essence—from what part of the body derived, and upon what tissue it first makes its attack, are, at present, matters of conjecture. Whether all persons are obnoxious to this poison, or whether there is a peculiarity in some, rendering them more susceptible of its

action than others, time and observation must decide. In the cases above noted the noxious cause evinced its power by depressing the vital energies, impoverishing the vital fluid, and deranging the sensorium. There are, doubtless, instances in which the infection, not being sufficiently concentrated or virulent to cause fatal consequences, makes known its existence in the continued bad health and low spirits of its victim. And this, it may be, is the secret why so many hysterical cases are so difficult to be controlled, and why in such cases the experience of our profession finds it profitable to prescribe temporary *absque marito.*

These cases and remarks are exceedingly interesting to the whole profession. We do not remember of seeing the latter spoken of before, and the subject demands of physicians a careful and attentive consideration. We should be pleased to see it thoroughly investigated.

HEREDITARY PREDISPOSITION.—Dr. Ogier (*Charleston Medical Journal and Review*) says: The diseases arising most commonly from hereditary predisposition, are scrofula, consumption, gout, insanity, asthma, angina pectoris, epilepsy, apoplexy, amaurosis and cancer. These by many authors are called hereditary diseases; but as this term is not exactly correct as applied to them, it would be as well here to draw a distinction between *hereditary disease* and *hereditary predisposition.* There are cases in which the disease seems to have been transmitted directly from the parent to the fœtus, as in an instance related by Mr. Hey, of a child having been born with syphilis, whose mother had never been diseased in the genital organs, but had contracted the disease in the *nipples during a previous confinement*, by an infected nurse drawing them —the disease had never been eradicated from the system of the mother, and when the second child was born it was found diseased. Dr. Jos. Brown, also relates his having found tubercles in the lungs of still-born infants, whose parents were consumptive. These then, are cases where the *disease* may be called *hereditary*—where the embryo may be supposed to have received a morbific principle, or the seeds of disease, with the principle of life, or commencement of its existence. The child here, if born alive, has the *disease already developed.* In hereditary predisposition, the child is born healthy, and frequently is not affected by disease until a late period of its life. Scrofula generally appears early in life; consumption about puberty; gout after puberty; amaurosis and cancer, especially in females, later in life, generally about or soon after the cessation of the menses.

As regards the practical application of our knowledge of hereditary predisposition, we think it may be usefully applied to many cases of disease, which come under our treatment. Some of these diseases we know, require an exciting cause to develop them, and knowing these causes, we have it in our power frequently to avoid them or correct them. To the scrofulous for instance, we would prescribe a mild climate, warm clothing and nutritious and invigorating diet. To the gouty, rigid temperance, regular exercise, &c., and so on in many other diseases, depending upon exciting causes, and even in some of those cases which become developed without the aid of any external cause, we may remedy the defect in early life, and thus prevent future disease, as in malformation of the prepuce by a simple incision, and in the deformity of the ribs and sternum, called pigeon breast, by mechanical pressure.

OPHTHALMIA—*a Sequela of Typhus Fever.*—Dr. DUBOIS, in the Annalist for June last, has called attention to the occurrence of ophthalmia as a sequela of typhus; he gives the particulars of seven cases he has treated for this disease. In six of the seven cases the patients had completely recovered from the fever, their general health was good, and the only complaint under which they labored was the disease of the eyes. The first symptom noticed by the patient in these cases was *muscæ volitantes* and dimness of vision. Soon after a dull appearance of the iris and cornea could be seen, which was generally followed in a few days by conjunctivitis and sclerotitis, the *iritic zone* (as the pink areola, which surrounds the cornea and is formed by the injection of the sclerotic vessels, is called,) was frequently present. Severe pain over the orbit with intolerance of light is generally present, and lymph effused into the anterior chamber is occasionally seen. The treatment consists in occasional cupping on the temples, small and frequent doses of calomel and opium, and the application of an ointment composed of Ung. hydrar. fort., ℥j., Pulv. gum opii, ʒj. Extr. stramonii, ʒij. to the brows and temples. Under this treatment the cases related by Dr. D. recovered speedily.

Pathology of Jaundice.—Dr. Wishart, in the St. Louis Med. and Surg. Jour. for December last, has published his views on this subject; he dissents from the generally-received opinion that idiopathic jaundice is produced by obstruction of the gall-duct, and expresses his belief that icterus is in every instance of gastric origin—that the first link of diseased action is seated in the stomach—that the phenonema exhibited in the course of the complaint, are but pathological effects proceeding from this cause, and that when discoloration of the skin, &c., arises from scirrhus of the liver or chololithus, these are barely symptoms of mechanical pressure, or stoppage of the bile-ducts by an extraneous body, or internal local obstruction, and not pathognomonic jaundice. To prove the correctness of these views, he cites the causes and symptoms of the complaint. Jaundice (says he) may proceed from a variety of causes, physical and mental; depressing passions, as fear, grief, nostalgia, &c., crude and indigestible substances taken into the stomach; miasms of malarious regions, and exposure to a high temperature in moist and unhealthy situations. All these make their first impressions on the stomach. Indigestion with its legion enters, sometimes pain in the left epigastrium occurs, or in the cardiac region, accompanied with eructation of the offending article. But at this stage of the disorder, neither fulness nor tenderness in the right epigastrium is felt. In from two to five days after the pain, nausea and fulness in the region of the stomach, fulness and tenderness in the right as well as the left epigastrium supervenes, with white stools, saffon-colored urine, and yellowness of the skin and eyes. This is generally the train of events. In every case of the disease dyspeptic symptoms have preceded the attack to a greater or less extent—gastric derangement is, invariably, a precursor of the attack. This is the first link in the chain of diseased action, which is extended by sympathy, until every organ concerned in the digestive process is implicated, and their secretory functions either impaired or suspended. The next in the catenation of functional derangement, is the production of depraved chyme, between which, when it reaches the duodenum, and the bile there is no affinity. Hence the bile ceases to flow into the duodenum, not from any obstruction of the duct by viscid bile, biliary calculi, or spasm, but because there is no longer any attraction for it there, and hence the biliary secretion is suspended. (?) He then proceeds to cite a number of cases in order to illustrate these points, after which he states that a still farther confirmation may be found in the treatment of the disease by emetics and the bitter infusions. The first evacuating the depraved contents of the stomach, and the second by their tonic effects upon the stomach, arousing this viscus to healthy action; after which gastric juice of the proper quality is elaborated, and all the functions of the digestive process rapidly assume a healthy character. Dr. W. closes his paper by deducing the following proposition, viz.: That the proximate cause of icterus is depraved secretion of the gastric juice.

COLD PLAGUE—*Diseases of the Army of Occupation.*—Dr. T. N. Love, surgeon to the 2d Regiment of Mississippi Rifles, in his *Remarks on some of the Diseases which prevailed in that Regiment during the first six months of service*, published in the *New-Orleans Med. & Surg. Jour.* for July, describes a disease which he has thus denominated. It may, perhaps, be remembered by many of the readers of the Journal, that this regiment suffered most severely during the earlier part of last year, and we now learn more definitely from Dr. Love, that during the first six months of service, this regiment sustained a loss of 201 by disease, and "discharges." The regiment was subjected to severe privation and suffering for some time preceding the occurrence of the disease. The epidemic, for so it may be called, was characterized by the following symptoms. The attack generally came on suddenly, without any premonitory symptoms, sometimes ushered in by a chill, and at other times with a severe pain in the head or some remote part of the body; sometimes livid splotches appeared upon the extremities, not of that petechial or eruptive character attendant upon malignant fever, but seemed to be the result of capillary paralysis; they were irregular in shape, varying in size from a pea to that of a half dollar, presenting no elevation of the skin. Some of the cases assumed the form of congestive fever, ushered in by a long protracted chill, coma, imperceptible pulse, re-action with fever, restlessness, followed the next day with an exacerbation, increased in intensity, and proving fatal the third or fourth day, while others were seized with a chill, weak, frequent pulse, great prostration, heavy weight at the precordia, frequent sighing, and occasionally slight difficulty of breathing; after a short time delirium would set in, the tongue became thickly coated, and the teeth covered with dark tenacious sordes, the patient on the sixth or eighth day would sink into a deep coma, low muttering delirium, opisthotonos, soon after followed by death. When (as in some cases it was the case,) the mucous membrane of the stomach and bowels became affected, it appeared to be more the result of a metastasis than a primary affection. Dr. L. remarks, that in most cases the nervous system received most of the shock through its sentient extremities and by means of the skin.

The main object, therefore, in the treatment was to restore a healthy action of capillary circulation, and enable it to resist the depressing effects of external causes. This was best secured by internal stimulants; brandy and opium were the best articles. The pediluvia with mustard; cataplasms with mustard; heat to the extremities, and friction. In those cases where the lungs became implicated, clysters were unavailing. It was necessary to husband all the patient's strength, avoid all sources of irritation and causes of debility, and shield the mucous surfaces with mucilages. Depletion, cathartics, emetics and quinine seemed only to aggravate the difficulty. The convalescence was long and tedious.

—

Sloughing of the Intestines. *Two Cases—Recovery of one.*—In the *Report of the Proc. of the New-York Path. Soc.*, contained in the Annalist for July 15th, Dr. W. Van Buren mentions the particulars, and presented to the Society the specimen of a portion of the intestine of a patient of Dr. Fell's of this city, of which the following is a brief sketch of its history. A man in good health over-exerted himself in loading a sloop with oysters; three days after, he was attacked with severe pain in the bowels, attended with vomiting; the abdomen soon became tympanitic, and symptoms of peritonitis became well marked. At the end of a fortnight he had in part recovered from the acute symptoms, but still had ill health, diarrhœa and emaciation. Some time after, he was attacked with spasms of the bowels, prostration and stercoraceous vomiting; from this he but partially recovered, being subject for some time to such attacks; and at the end of two years from the first occurrence of difficulty, he was seized with spasm of the bowels, and the attendant symptoms of another attack, after which he passed "something at stool, which was three quarters of a yard long, hollow and red inside, and looked like, and probably was intestine." He then had bloody stools, occasional stoppage of the bowels, after which small pieces were passed per anum; mucous diarrhœa was present after a time, attended by vomiting, and followed by emaciation, and the discharge of pus per anum, and death. The autopsic examination performed by Drs. Darling and Fell, disclosed the absence of all evidence of previous peritonitis—the mass of intestines diminished in length—and around the ilio-cœcal valve and throughout the whole course of the large intestines, thickening and ulceration of the mucous membrane. On blowing up the intestine, a manifest puckering of the mesentery, and evident contraction of the canal where the sloughing portion had been cast off.

Professor Dickson, of the University, on being asked if he had ever met with any instances of a similar kind, stated that he had many years since attended in consultation a lady, who in the collapse of yellow fever, and in a condition of disease apparently hopeless, passed by stool, two portions of intestine, as it was decided to be, by all the physicians in attendance—four and six inches in length. They came away amidst large quantities of black matter, which she also vomited freely. He did not see her till she had sunk into collapse, and was incapable of any definite expression of local suffering, giving token of pain only by almost constant and grievous moaning. Earlier in the attack she had complained of much pain in the bowels, increased on pressure, and for some days was tympanitic. The discharge of these pieces took place on the 7th day of her attack, when she seemed absolutely moribund. She, however, rallied, and after a very tedious convalescence, marked by no special tokens of abdominal derangement, during which, as in many other cases of the epidemic of that year, there was occasional hemorrhage from the bowels, she ultimately recovered entirely.

STRICTURE OF THE ŒSOPHAGUS.—*Employment of Nutritious Injections.*—(*Charleston Medical Journal and Review.*)—Dr. Cain gives the particulars of a case of stricture of the œsophagus, attended with ulceration, just above the point of stricture; the ulcer perforated the anterior wall of the œsophagus, and opened into the trachea. Large quantities of pus were discharged for some time previous to death, which led Dr. C. to believe that an abscess of the walls of the œsophagus existed. The autopsic examination showed that it proceeded from an abscess which had formed in the left lung. Repeated attempts were made for the purpose of introducing nutrient fluids into the stomach, all of which proved unsuccessful. Finding this to be the case, Dr. C. resorted to nutritive injections for the purpose of prolonging life. The immediate effect of the injection was to raise the temperature of the body, which had been very much lowered, to quench the thirst, and in some measure, assuage the pangs of hunger. These effects were much more apparent after the injections had been repeated a few times. A singular effect, remarks Dr. C., followed the use of the first injection, which was the establishment of the urinary excretion after it had been suspended for at least forty-eight hours. Having continued the use of the injections for a time, the strength of the patient became so much recruited that he was able to rise from his bed and walk about the room; his cheeks became somewhat fuller, and his eyes from a lack-lustre, assumed a brighter look.

With a view of prolonging life, or of supporting life while we attack the disease, in cases of stricture of the œsophagus, Dr. C. says three measures have been recommended, widely differing in their character.

> The first that I shall notice is the operation of œsophagotomy which has on several occasions been successfully performed for the extraction of foreign bodies from the œsophagus. The only instance, so far as I am aware, in which it has been performed for supplying the stomach with food is that recorded by Dr. John Watson, of New-York, in the October number of the American Journal Medical Sciences for 1844. In this case the patient's life was certainly prolonged for a considerable time, as any one may satisfy himself by reference to the article in question.
>
> The class of cases, however, in which this operation is feasible, is certainly of simple membranous stricture, in which by supporting the life of the patient, we are allowed time to dilate the stricture with bougies. In cases in which the ulcers are situated low down, it is evident that the operation would be worse than useless; it would, in all probability, hasten the fatal termination.
>
> The operation of cutting into the stomach, although formidable, is not necessarily fatal, and has been performed a number of times for the removal of foreign bodies which had found their way into the organ by being swallowed. Numerous instances, among which the most remarkable is that recorded by Dr. Beaumont, occurring in the boy Alexis Martin, are to be found in the books in which fistulous communications between the stomach and the external surface of the abdomen, either the result of injury or of disease of this viscus, have existed for years without interfering with the digestive functions or impairing the general health.

The cases in which this operation is admissible are, I conceive, the same as those in which the operation of œsophagotomy is warranted. I shall make a few remarks in conclusion, on the third of the measures above spoken of, viz: that of nutritive injections into the colon, which at least possesses the merit of being entirely free from danger, although life may not be so far prolonged by it as when either of the other operations are performed and food is introduced into the stomach, and this for the obvious reason that the digestive process, if it goes on at all in the large intestine, must necessarily be very imperfect. Here that elaboration of the alimentary mass by the fluids of the stomach and the saliva into the chyme cannot take place. It is probable that it is chiefly by the physical endosmotic movement, or imbibition, that the substances thrown into the large intestine find their way into the venous system. It has been well ascertained that pectine, gum, sugar, soluble albumen and gelatine, if in a state of perfect solution, are immediately absorbed by the veins of the stomach, and we see no reason why the same process should not obtain in respect to the large intestine.

* * * * * * * * *

That injections, composed of certain nutritive substances in a state of perfect solution, are instrumental in prolonging life, numerous cases scattered through the books fully attest. The longest term during which life was supported by these means, so far as I am aware, is that recorded by Mr. Ormerod, of a patient about 20 years of age, who was admitted into St. Bartholomew's Hospital, under the care of Mr. Lawrence, with his pharynx opened and the glottis exposed. He was unable to articulate and vomited frequently through the wound, for an hour and a half, fluid mixed with blood. On the second day he had an enema of milk. From the second to the forty-first day, he took daily, in three enemata collectively, two pints of broth made from rather more than one pound of beef. His hunger was always appeased by the enemata. When his bowels were confined some salt was added, which was sufficient to open them. Once some wine was added to the injection. On the forty-first day the injections were omitted, and food was given by the mouth. On the fifty-first day the wound was nearly healed, and the man looked well and in tolerably good condition.

SURGERY.

Statistics of Amputations. By H. W. Buel, M. D.—*(American Jour. of the Med. Sci.)*—Dr. Buel, Resident Surgeon of the New-York Hospital, has collected and arranged in the form of tables, the results of all the amputations which have been performed in the New-York Hospital, for a period of nine years previous to January 1st, 1848. From these tables, it appears that the whole number of amputations performed during the period mentioned, was ninety-one, of which, twenty-six were fatal; making the mortality 28·57 per cent. The following is Dr. B.'s summary of the character and results of the operations.

Of amputations at the hip-joint there was one, and that fatal.

Of amputations of the thigh, the whole number was thirty-four, of which ten were fatal; making the mortality 26·47 per cent.

At the knee-joint there was one amputation, and that fatal.

Of amputations of the leg, the whole number was twenty-four, of which seven were fatal; making the mortality 29·16 per cent.

Of amputations at the shoulder-joint, the whole number was nine; of which four were fatal; making the mortality 44·44 per cent.

Of amputations of the arm, the whole number was eleven, of which none were fatal.

Of amputations of the forearm, the whole number was thirteen; of which three were fatal; making the mortality 23·07 per cent.

So that we have sixty amputations of the lower extremity; of which nineteen were fatal; making the mortality 31·66 per cent.

While of thirty-three amputations of the upper extremity, seven were fatal; making the mortality 21·21 per cent.

With regard to the methods employed in these various operations, the reports of the cases do not, in every instance, specify the method; but in forty-nine cases, (the whole number in which it is specified,) twenty-four were performed by double flap operation, and twenty-five by circular operation. Of the first number, four were fatal; making the mortality 17·66 per cent. Of the last, three; making the mortality 12 per cent.

Of the double-flap operations, there were fifteen of the thigh, of which two were fatal; three of the leg, of which one was fatal; four of the arm and one of the forearm, of which none were fatal.

Of the twenty-five circular operations, six were of the thigh, of which none were fatal: fifteen were of the leg, of which three were fatal; three were of the arm, and one of the forearm, of which none were fatal.

Secondary hemorrhage occurred in only one of these forty-nine cases, and in that, it occurred twice.

There were, in the whole number, two other cases, making, in all, three cases of secondary hemorrhage. The greater mortality of the flap operation may, perhaps, be attributed to the greater proportion of thigh amputations performed in that manner.

As to the question, whether primary or secondary amputation is preferable, it is evident, that an equal number of similar cases should be selected from each class, in order to institute anything like a just comparison. It is customary at the New-York Hospital, when amputation is demanded after severe injuries, to operate before the accession of inflammatory action. So that, strictly speaking, the occasions for secondary amputations will be comparatively rare.

Of the whole number of amputations, sixty-two were the result of injuries, and were fatal in nineteen cases; making the mortality 30·64 per cent.

Of these, thirty-six were primary amputations; of which there were of the hip-joint one, and that fatal; of the thigh, seven, of which four were fatal; of the leg, twelve, of which five were fatal; of the arm, seven, and of the forearm, five, of which none were fatal. Making the mortality 27·77.

The remaining twenty-six amputations may all be said to have resulted from injuries of a more or less severe character.

Of this number, eleven were amputations of the thigh, of which three were fatal. At the knee-joint, one, which was fatal; of the leg, seven, of which one was fatal. At the shoulder-joint, five, of which three were fatal; of the arm, one, and of the forearm, one, of which neither was fatal; making the mortality 30·76 per cent.

The number of operations for various chronic affections was twenty-nine, of which six were fatal. Of the thigh there were eighteen, of which four were fatal. Of the leg, five, of which none were fatal; of the arm, three, of which none were fatal; of the forearm, four, of which two were fatal. Making the mortality 20·67 per cent.

The ages of the patients operated upon were as follows:—

Under	10 years of age,	4,	of whom	1	died.
Between	10 and 20,	11,	"	1	"
"	20 and 30,	32,	"	12	"
"	30 and 40,	21,	"	5	"
"	40 and 50,	11,	"	4	"
"	50 and 60,	9,	"	2	"
"	60 and 70,	2,	"	0	"
"	70 and 80,	1,	"	1	"
		91		26	

The whole number of females was 9, of whom 3 died.

Medical Treatment of Cataract.—Dr. James Bryan, (*Med. Exam. for July*,) from a series of observations made in public and private practice, has been led to believe that cataract in some forms at least, and particularly in its early stages, is curable without the aid of operation. His views as to the origin of cataract were first derived from an examination of the eyes of animals, which had been suspended in the ordinary way, after being killed by the butchers, the eyes of the calf were invariably found to contain the lens in a greater or less degree of opacity. This condition he attributes to a state of engorgement; the necessary result of the suspension. From these facts he is led to believe that engorgement of the capsule of an inflammatory character is the producing cause of cataract. With this view of the nature and cause of the affection, (says he,) I was prepared to stop the growing, and perhaps remove the already formed opacity of the lens, by antiphlogistics, counter-irritation, and alteratives. The treatment which is proposed consists in the use of general blood-letting if the pulse be strong and full; if not, leeches to external angles of the eyes, blisters to the temples, free catharsis at first, and the action upon the bowels, kept up by the use of senna and sulphate of magnesia; the eyes to be covered with a green shade, and the patient to remain in a dark room. After this treatment has been continued for a week or so, blue mass should be resorted to in three grain doses, three times per day, until the gums are touched; the blisters to the temple or back of the ears to be kept discharging by the use of an ointment consisting of Ung. resinæ, ℥j., with Cerate cantharides, ʒj., applied to the blistered surface. Several cases are detailed illustrating the success of the treatment, which by-the-by, is directly opposed to the opinion of Mr. Lawrence, who says, "the opacity of the capsule and lens, constituting cataract, cannot be changed by any treatment hitherto discovered." Certainly, the success of Dr. Bryan's cases, should induce a trial of the plan in similar cases.

Fissure of the Soft and Hard Palate.—(*Buffalo Med. Jour.*)—Prof. Hamilton has given an analysis of a memoir recently published on this subject, by J. M. Warren, M. D., whose success is extraordinary if not unequalled. Having had twenty-six cases, twenty-three of which were complicated with fissure of the hard palate—twenty-five cases where the operation proved completely successful. "Roux, we believe, succeeded with only one out of three." Dr. Warren's operation, remarks Prof. H., is original in several points.

1st. He relieves both the fissure in the soft and hard palate in a single operation.

2d. In cases of wide cleft, he cuts through the posterior pillar of the soft palate, and thus allows the edges to be brought more easily into contact. A similar process was suggested by Ferguson, in 1845, but the cases of Warren had precedence.

3d. The patients are allowed liquid food in the quantity required, by which the sufferings of the patient are not only greatly diminished, but the dryness of the fauces being prevented, the violence of the inflammatory process is greatly abated.

In one case, after cutting the posterior pillar, a troublesome hemorrhage occurred. In all of the cases a small opening remained after the wound had healed at the angle of the fissure, but this was subsequently closed by repeated applications of the nitrate of silver, &c.

In the conclusion of the pamphlet is an appendix on the subject of "early operations for hare-lip," of which he is a strenuous advocate. Dr. W. has repeatedly operated when the child was only twenty-four hours old! He prefers interrupted sutures to pins, and recommends a straight needle.

—

DISLOCATION OF THE FEMUR; *Post-mortem appearances on dissection.*—Dr. Fenner in the *New-Orleans Med. and Surg. Jour. for July*, gives the particulars of a dissection of the hip, of a fireman admitted into the Charity Hospital, who died from fatal injuries received by the bursting of the boilers of a tow-boat three days after the receipt of the injury—his condition being considered altogether hopeless, no attempt was made to reduce the dislocation. The luxation was upwards on the *dorsum ilii* of the left side; the limb was shortened about an inch and a half, and the toes were turned inward. Extensive ecchymosis was found around the joint, along the fascia superficialis, and among the muscles as low as the knee. On raising the glutæus maximus and medius, the naked head of the femur was exposed lying on the dorsum of the ilium with the *ligamentum teres* hanging to it; a partial separation of this ligament from the head of the femur existed. The head of the femur, in being forced upward and outward, had ruptured and lacerated a portion of the obturator externus, pyriformis, and gemini muscles. After all the external muscles about the joint had been dissected up, the thigh could not be brought down; the iliacus and psoas magnus were then severed, these allowed it to descend a little, but the head could not be replaced. The triceps adductor was then divided without effect. The ilio-femoral ligament was found tensely stretched; all the muscles between the pelvis and the thigh were then severed; no obstacle to the complete extension of the limb now existed, "*yet it was found impossible to replace the head of the femur into its proper position. It could not be forced back through the aperture in the capsular ligament out of which it had passed.*" To one half of its extent the capsular ligament was ruptured, and the opening "*had to be enlarged from one half to three quarters of an inch before the head of the femur could be put back into the cotyloid cavity:*" here lay the chief obstacle to the reduction of the dislocation.

The particulars of this case are exceedingly interesting. They show that in this instance at least, the muscles would not have been the chief cause of resistance to a reduction of the dislocation; they also show that the capsular ligament, although strong and fibrous, possesses "sufficient *elasticity* to allow the smooth head of the femur to pass out through a lacerated opening which might at once contract, so as to offer considerable resistance to its return. These, it will be remembered, are very different views from those held by many of our best authorities. Dr. F., with due deference to the opinion of Sir Astley Cooper and others, believes that the "capsular ligament may often cause much difficulty in reducing dislocations of the hip-joint."

MIDWIFERY.

Labour with Quadruplets.—(*Illinois and Indiana Med. Jour.*)—Dr. Welch reports a case of quadruplets where the labor set in at the close of the seventh month of gestation. The patient at the time of labor was suffering from extreme anasarca of the lower extremities, and great œdema of the labia pudendum. While the labor was going on, several small punctures were made in the labia by means of the lancet, from which a large quantity of serum flowed. The labor had been apparently near its termination for several hours, when suddenly two fœtuses, in appearance of about six months' growth, were expelled, one after the other. One was somewhat decomposed, and the other barely showed signs of life. Soon after, in searching for the after-birth, the fingers of the accoucheur felt the membranes of a third, which was soon delivered by the feet; this was in appearance at about the seventh month; it was still-born, but was resuscitated by means of artificial respiration. A few minutes after, the head of a fourth child presented, and delivery was soon completed; this was more vigorous than the other. The two double placentæ were then "extirpated." (?) There was some hemorrhage, but it was speedily arrested. The first two were girls; the last two, boys.

Dysmenorrhœa.—Dr. H. J. Holmes, of Mississippi, has recently written a letter to the editors of the New-Orleans Medical and Surgical Journal, in which he states that the congestive, plethoric or inflammatory form of dysmenorrhœa is easily managed by a well-directed course of treatment. It is only in the *irritable form* that so much difficulty is encountered, and which has been generally considered incurable. The object of the letter is to throw some light upon the subject of the treatment of this disease, and propose a remedy which never fails to relieve pain, and if continued, will establish the *period*, and make it regular, free and healthy. The frequent trials I have made with it, says Dr. H., in all the forms of dysmenorrhœa, and particularly in the neuralgic or irritable, has convinced me that it acts specifically upon the uterus, in relieving pain and spasms, increasing the flow, dilating the canal, and permitting coagula or membranes to pass without the least inconvenience. The remedy has been tested fully in a case which I now have under treatment. The patient has irritable dysmenorrhœa, accompanied with convulsions, and dependant upon ulceration of the canal and os uteri; the pain has been entirely relieved, but the ulceration still remains, the cure of which I intend to effect by means of the caustic.

The prescription is as follows:

℞. Gm. Camphor, ʒ ijss.
Ext. Belladonna,
Sulph. Quinine, āā ʒss.
M. ft. et divid. in pil. No. 80.

These pills are to be taken only at each period, and at the commencement of pain. Dose, two every hour until the pain ceases. In extreme cases, they may be given during the intervals of the periods, say one pill two or three times a day.

[We have been in constant habit of using the above combination both in public and private practice for the last three years, and know it to be a valuable remedy in irritable dysmenorrhœa. We do not remember of seeing it in print before.—Ed. Jour.]

TREATMENT OF RETROVERSION OF THE UTERUS.—By Prof. Evans (*North-Western Medical and Surgical Journal.*)—The *treatment* of retroversion, as a general rule, is plain and easy, in all cases of recent occurrence. The indications are, to replace the uterus, retain it in its natural position, and meet any irritation or inflammatory symptoms by their appropriate anodyne or antiphlogistic remedies.

The facility with which the first indication can be fufilled, will depend, to some extent, upon the size of the uterus, the capacity of the pelvis, the amount of inflammation, the condition of the rectum and bladder, the length of time that has elapsed since the displacement occurred, and the formation of adhesions between the uterus and other pelvic viscera, the most liable seat of which is between the fundus and the rectum.

If it be a recent case, there need be no fear of adhesions, and the reposition should be attempted at once. Before proceeding to the fulfilment of this indication, the condition of the patient, in reference to irritation, fever, and inflammation, should be carefully observed. And, in case much evidence of irritation be present, either it should be allayed by the administration of an anodyne, or the chloroform or ether should be given.

If symptoms of inflammation, or if much fever be present, the operation may be safely premised by a free bleeding, in which case, also, on account of the tenderness of the parts to pressure, and the consequent pain produced, will it be more particularly advisable to use an anæsthetic agent. After evacuating the bladder by the use of the catheter, which will sometimes be a little difficult of introduction, on account of the pressure upon the urethra, but by using a male gum-elastic catheter with a stiff stilet, this can be pretty readily overcome, and the catheter can be passed up as high as is necessary, and after procuring a passage from the bowels by an injection, the attempt at reposition may be made.

In some cases this may be effected simply by pressing the fundus through the vagina upward, with one or two fingers, while the patient rests on her knees and breast, to remove the pressure of the abdominal viscera from the uterus, and prevent bearing down.

If this does not succeed readily, I would not pass the finger into the rectum as advised by some, for by it there would be no advantage over the former effort; but I would pass the hand at once into the vagina, and this can scarcely fail of success. The advantages of this procedure are plain; first, by distending the vagina laterally, it is contracted longitudinally, which has a tendency to draw the os tincæ down; second, by the whole hand the uterine tumor can be supported and pressed up by a much broader support than any other means, and hence there is less liability of disturbing the attachments of the ovum and producing abortion; third, with the hand introduced, you can carry the fundus up as far as is necessary for complete reposition.

If the retroversion be of long standing, the reposition must be made with much care, lest, if adhesions have formed, lacerations may be produced. Of this, the experienced operator can judge by the amount and manner of resistance offered to reposition. In such cases, attended with pregnancy, the only chance for relief is in abortion, which will often come on spontaneously, or in consequence of efforts at reduction. In some cases it is advised to rupture the membranes, and where the os uteri cannot be reached for this purpose, Dr. Hunter advised to evacuate the liquor amnii by puncturing the uterus through the vagina or rectum, with a small trochar and canula. This has, in several instances, been successfully practised. Where the uterus is bound down by adhesions, it is better to let it be than run the risk of producing a more serious injury, by attempting to break them up.

After it is replaced, the uterus will generally remain in its proper position, if the causes that produced the displacement be sedulously avoided. Distention of the bladder and active exertion should be especially guarded against.

Where the uterus is growing from the development of an ovum, it will soon be too large for a recurrence of the malposition to be possible. Under other circumstances, the use of a pessary may be serviceable, by distending the vagina laterally, and contracting it longitudinally, thus holding the cervix uteri down, and by filling up, to some extent, the space in the cavity of the sacrum, into which the body of the uterus inclines to descend.

When debility attends the displacement, appropriate tonic treatment for it should be adopted.

UTERINE HEMORRHAGE.— Prof. Linton, one of the editors of the *St. Louis Medical Journal*, has, in the last December number of that Journal, proposed a novel mode of treating this difficulty. It consists in the application of bandages to the legs, commencing at the foot and extending to the hip. He furnishes the particulars of a case thus treated. A lady of previous good health and robust constitution, soon after the delivery of the placenta, was seized with a profuse and alarming hemorrhage; some delay occurred in obtaining ergot, during which time a firm clot from the vagina and uterus was cast off. The state of the patient now became extremely alarming, although the uterus was tolerably firmly contracted; "the general system was *already* in a state of prostration, from which I feared it would be difficult to arouse it;" the bandages were immediately resorted to, a decided improvement in the condition of the patient was soon evinced, "and in half an hour I was able to leave her without apprehending danger." His colleague Dr. McPheeters has also witnessed its beneficial effects in a case of severe hemorrhage which occured during a miscarriage; he states that two or three moments after the application of the bandage the state of the pulse exhibited a decided improvement. The patients in each instance expressed themselves decidedly relieved by their use.

Dr. L., in closing the report of his case, remarks, "it is not necessary to discuss the mode in which it acts as every one will see that it is by supplying the general system with blood from the legs." Dr. McP. says, "it is not unreasonable to suppose that six or eight ounces of blood may in this way be supplied to the general system, and to that extent the drooping powers of life sustained, while other remedies are brought to bear." Certainly their application can do no harm, and in many cases of extreme exhaustion we have no doubt but that their use would be followed by the most pleasing effects. The readiness with which they may be obtained renders it well worthy of the notice of all, and particularly those who practice in remote sections of the country. May not the difficult and dangerous practice of transfusion be at least sometimes obviated by their use?

MISCELLANEA.

BELL'S DISEASES OF FEMALES.—John Bell, M. D., of Philadelphia, has now a work in preparation, "On the Diseases of Females. With special reference to their Hygienic Prevention and Treatment." The announcement of it by the publishers, (Messrs. Barrington & Haswell,) contains the following: "In this work, the author will take pains to point out the hygienic measures required for the prevention of the diseases to which, by her anatomical and physiological peculiarities, the female is liable, independently of the merely sexual organs. The differences in the nervous system, state of the blood, &c., indicate the necessity of differences, or, at any rate, notable modifications in both her physical and medical treatment. From birth, her future destiny and exposures, as mothers, ought to receive more attention, in reference to the laws of hygiene, than has hitherto been given to the subject. The relative frequency of the diseases of the sex in different periods of life, and the value of particular modes of treatment, will be tested as much as possible, by statistical returns; thus correcting the fluctuations of opinion and the obtrusions of hypothesis."

BECK'S ELEMENTS OF MEDICAL JURISPRUDENCE.—Prof. T. Romeyn Beck, we observe from a paragraph in the Albany Evening Journal, has resigned his connection with the Albany Academy, and is now to devote his leisure time to a speedy revisal of the "Elements of Medical Jurisprudence;" the last edition of this very valuable work having been out of print for two years past.

CONNECTICUT STATE MEDICAL SOCIETY.—From the published proceedings of this Society, we learn that its annual meeting was held in May last, and that the following officers were chosen for the ensuing year, viz: Archibald Welch, M. D., *Pres.;* George Sumner, M. D., *Vice-Pres.;* V. M. Dow, M. D., *Treas.;* Gurdon W. Russell, M. D., *Sec.* The annual address was delivered by B. Fordyce Barker, M. D., entitled Remarks on some Forms of Disease of Cervix Uteri.

In 1793, there were 255 members belonging to the Society; in 1829, 284; and at the present time there are 396 members.

MEDICAL SOCIETY OF NEW-JERSEY.—In the July number of the New-Jersey Medical Reporter, we find a historical account of this society, from which we learn, that this is the oldest medical organization in the United States. The Medical Society of New-Jersey was organized on the 23d day of July, 1766, fourteen physicians became members. It was incorporated by an act of the general assembly of the province of New-Jersey, passed the 2d day of June, 1790.

At the close of the historical account contained in the Reporter, we find the following conclusions:

1. That the Medical Society of New-Jersey, dating its origin from the year 1766, was the first and most ancient society of the kind regularly formed and organized on this continent.

2. That the colonial legislature of 1772, actually passed an act to regulate the practice of physic and surgery within the then province of New-Jersey.

3. That the legislative act to regulate the practice of physic and surgery, passed in the year 1772, from the best evidence we now have, was the first of the kind enacted by any state in the Union.

4. That as far as we can now ascertain the fact, New-Jersey has not been behind any state in the confederacy, thus far, in legislating from time to time with a view to prevent quackery under any name or form, within its bounds.

A NEW MEDICAL JOURNAL.—We have received from J. H. Riley & Co., of Columbus, Ohio, the prospectus of a new Medical Journal, which they propose to establish in that city. It is to be called The Ohio Medical and Surgical Journal, and to be edited by John Butterfield, M. D., Professor of the Practice of Medicine in the Starling Medical College. The work will be issued every alternate month; each number will contain ninety-six octavo pages of reading matter. The well-known reputation of Prof. Butterfield is a sufficient guarantee for the ability and success of any journal with which he may become connected. We extend to this new gleaner in the field of medical literature a hearty welcome, and wish for it a long and prosperous career.

OBITUARY.

Died, at New-Orleans, on the 8th of August, PRESLEY H. CRAIG, M. D., U. S. A., one of the oldest surgeons in the United States service. The deceased, while living, possessed, to an almost unlimited degree, the love and respect of all who knew him, and there are few whose demise will be more deeply regretted.

At Burlington, N. J., on the 18th of June, ISAAC S. HAINES, M. D., æt. 40. He was a very respectable practitioner, and a graduate of the University of Pennsylvania; also the author of a Catechism adapted to the course of Chemical Lectures in that University by Professor Hare—a very popular little work among the students.

On the 25th of April last, in the 24th year of his age, on board of the ship Victoria, on her voyage from London, EDWARD H. DELAFIELD, M. D., eldest son of Edward Delafield, M. D., of this city.

PART FOURTH.

FOREIGN MEDICAL RETROSPECT.

ANATOMY AND PHYSIOLOGY.

On the Use of the Pancreatic Fluid. By M. Bernard.—Prof. March has recently communicated in a letter to the editor of the *Boston Medical and Surgical Journal* some interesting facts in regard to the use of the pancreatic fluid. In speaking of M. Bernard, he says "that he promises to become one of the first experimental physiologists of Europe. He has already highly distinguished himself by his experiments and researches in digestion, and in the circulating and nervous systems."

His researches with respect to the pancreatic fluid, are quite recent, and establish, beyond all question, the exact uses of that secretion. The following is the substance of what he has arrived at on this point. The pancreatic juice, when collected from a living animal (a dog, for example,) by means of a fistula artificially established, has nearly identically the same physical character as the saliva, being limpid, colorless, slightly ropy, and rather heavier than water. It is constantly alkaline, and is coagulable by heat and strong acids, owing to the presence of albumen. The saliva is slightly alkaline when collected pure, but never coagulable by heat or acids. When the pancreatic juice is put in contact with azotized aliments, as fibrine, albumen and gelatine, there is no effect produced. Putrefaction occurs in time, but no digestion. When applied to farinaceous substances, they are changed into sugar, which is absorbable. Thus far there is nothing new—all this having been previously established. He, however, has shown—and the *merit* of this discovery is solely due to him —that when this fluid is put in contact with fatty substances of every nature, as oils, animal fats, butter, &c., they are quickly digested or decomposed, and reduced to a state in which they may be absorbed into the circulation. This property is peculiar to the pancreatic juice, not being possessed by the saliva, gastric juice, bile, serum, nor by any other fluid of the animal economy.

The pancreas, therefore, now takes rank with the most important organs of the system. I have seen him repeat his experiments with this fluid, and they are quite conclusive. The first effect produced, when you put the pancreatic fluid in contact with oil, or any fatty substance, is to form an intimate emulsion, which will not separate on standing. If you agitate oil with saliva, gastric juice, serum, or *pure* bile, or any other animal fluid, the mixture separates when in repose. (Bile of animals mixes, or makes an emulsion, with grease, by virtue of the pancreatic fluid that is frequently mixed with it.) After the emulsion is produced, the oil is decomposed into *glycerine* and a *fatty acid*, as the oleic acid, &c., which are absorbable, as well as the simple emulsion.

He has also established another very important fact in regard to the digestive fluids—which is, that the union of the bile and pancreatic fluid produces a new and distinct fluid, having in addition to the peculiar properties of these two fluids, another superadded, viz., that of digesting azotized substances, or, in other words, the properties of the gastric juice. It therefore digests all alimentary substances. and is altogether the most important of the digestive fluids. This is found in the duodenum in man, below the orifice of the ductus communis choledochus, and in animals below the orifice of the pancreatic duct. By means of this fluid, which he calls the intestinal fluid, aliments which are not digested in the stomach, are acted upon in the intestines. The property that the pancreatic juice possesses of transforming starch into sugar, and which until now has been considered its chief property, is a very subordinate one, and by no means peculiar, as almost all the other fluids of the economy possess it, viz., the saliva, serum of the blood, liquid of cysts, &c.

All the effects produced by the pancreatic juice as above described, are equally well seen by taking the pancreas of a freshly-killed animal, as a chicken, dog, pig, &c , and bruising it, and pouring a little tepid water upon it. Let it stand, or agitate it a few minutes, and you have an artificial pancreatic fluid, with which you can perform all necessary experiments. If you kill the animal in a state of digestion, the fluid will be more active, as the pancreas is then in a state of greater activity. In the same way you can make artificial gastric juice, by taking the stomach of an animal. But the pancreas must be quite fresh, and the pancreatic fluid changes very quickly and loses its properties, whereas the gastric juice keeps indefinitely.

Physical Influence of Capillaries on the Circulation—Although it would not *à priori* be expected that these minute vessels (the capillaries), the phenomena of which it has been so much the custom to regard as of a peculiar vital nature, are those in which physical laws would have much place, yet minute observation has shown that this is the fact. In the discussions of that much vexed question whether the capillaries had or had not vital powers by which they modified the general force of the circulation, upon which it is not necessary now to touch, one of the most essential facts of the whole vascular action was overlooked; it is this, that the mechanical arrangement of the tubes in each different organ of the body is so contrived as to modify the propulsive force of the heart, in consequence of which a local and peculiar kind of circulation is established in each particular part, according to its requirements. This fixed but adapted framework, stamped in the very act of development on the ultimate division of the circulatory organs, is so definite and precise, that the anatomist on seeing the minute vessels under the microscope, can predict to what class of organs they belong. The mechanical disposition to which I have referred, may be briefly expressed by stating, that the collective capacity of the capillary system varies in each organ, when compared with the area of the terminal arteries with which it is associated; and as the capacity of circular tubes enlarges in the ratio of the squares of the diameter, and as friction increases in the inverse ratio of the same measurement, we have the necessary data for determining the admeasurements which have been accumulated by so many observers, and which to many persons may seem to have no application. —*Med. Gaz., from Mr. Grainger's Hunterian Oration.*

The Eye Naturally Adapted for Distant Vision.—Volkmann and Hueck both agree in considering that in its quiescent state, the eye is adapted to the vision of objects situated at the furthest point of distinct sight, and not, as has been generally supposed, of those situated about midway between this and the point of distinct vision nearest to the eye. In this case, therefore, in order to accommodate itself to the vision of an object placed at any distance within the furthest point of sight, the eye will require but one act, that, namely, of increasing its focal distance in proportion to the nearness of the object under view: no act will be requisite to adapt it to the perception of distant objects, for, in reverting to its state of rest, it at once resumes its capacity for distant vision, and retains it so long as its quiescent state continues. In proof of this opinion, Volkmann observes, that in a state of rest, the axes of the eyes are directed towards a point even considerably beyond the most distant point of distinct vision, and that, since changes in the position of the axes usually correspond with changes in the adaptation of the eyes, it is improbable that the meeting of the axes beyond the most distant point of vision should coincide with an adaptation of the eyes for an object on this side of the point. According to Hueck, this view will also explain the distinct formation of the image of distant objects on the retina after death; as also the far-sightedness induced by the action of hyoscyamus and of belladona.—*Med. Gaz., from Baly and Kirkes's Recent Advances in Physiology.*

MEDICAL PATHOLOGY AND PRACTICAL MEDICINE.

Condition of the Blood-vessels in an Inflamed Part.—By Dr. C. Bruch.—From a pregnant bitch, Dr. Bruch removed the left Fallopian tube and ovary, and closed the wound in the linea alba with sutures. During the first day the animal did not appear to suffer much from the operation: it lay quietly, and took food; but on the second day it vomited several times, and about noon was found dead, having lived from forty to forty-five hours after the operation. On examining the body directly afterwards, the wound in the skin was found almost completely closed by recent exudation, only a small point being left still open, and this was filled with pus. In the cavity of the abdomen several ounces of chocolate-colored blood were found. This, under the microscope, presented unchanged blood-corpuscles, and numerous colorless, finely granular globules, some of which, on the addition of acetic acid, showed a large round body (nucleus) in their interior; while in others the acid brought into view two, three, or more small granules; the former were probably colorless blood-corpuscles; the latter more nearly resembled pus-corpuscles. The omentum had a dark-red fleshy appearance, was rolled up in the left hypochondrium, matted together, and adherent to the neighboring intestines by recent exudation. In the situation whence the left ovarium had been removed was a small collection of pus. The peritoneum lining the abdominal walls had, for some distance around the wound, an intense red color, from the injection of its blood-vessels, which were visible to the naked eye, and presented a remarkably tortuous appearance. It was not adherent to any part, and presented no exudation on its surface, which was tolerably smooth, glistening, and transparent, resembling much the appearances usually presented in the first stage of inflammation. A small portion of this injected membrane was placed beneath the microscope, and examined with a magnifying power of 100 diameters. It showed a dense network of blood-vessels, every branch of which was filled with blood, while the majority of them presented also a singularly varicose appearance. Each such varicose vessel, when viewed in the midst of others, presented not merely a sudden aneurismal dilatation here and there on its walls, but a general widening of the tube, which extended for some distance: the vessel also presented a remarkably tortuous spiral form, showing that it was not merely dilated laterally, but also increased in length. From the dilated parts fine vessels of an ordinary and uniform diameter and straight course proceeded; the varicose vessels also terminated in one or more fine ordinary branches. This singular appearance of the blood-vessels is in close resemblance with that recently described by Hasse and Kœlliker as occurring in the vessels of mucous membranes affected with chronic inflammation. It is therefore not characteristic of chronic inflammation, neither is it peculiar to inflammation of mucous surfaces alone, but it is probably an attribute of inflammation gnnerally. The reason why this condition of the vessels has not hitherto been found in acute inflammation, is because it probably only occurs at the stage preceding the occurrence of exudation; and the fact of Hasse and

Kœlliker having observed it in chronic inflammation, may be explained by believing that the continuance of the inflammatory process after the first outpouring of exudation is nothing else than the continuance of the dilated state of the vessels.

In regard to the size and the nature of the dilated blood-vessels, Dr. Bruch's observations do not coincide with those of Hasse and Kœlliker. The latter observers are of opinion that it is the capillaries which are enlarged; but Dr. Bruch, from repeated measurements, and the general appearance of the vessels, states that in his case the finest vessels were quite unaltered, while the dilatation was confined exclusively to what appeared from the thickness and structure of their walls to be the smaller arteries, or the capillaries of the second order as classed by Henle. From the fact, therefore, of the capillaries not being the vessels exclusively, or even chiefly, the seat of dilatation, it would appear in Dr. Bruch's opinion, that the dilatation of the smaller arteries should be regarded as the primary and essential change occurring in inflammation. This view harmonizes with the hypothesis advanced by Henle, that the dilatation of the vessels in inflammation is due to the influence of the nerves by which these vessels are supplied; for it is well known that the smaller arteries are provided with nerves, while the capillaries are not. Henle also believed that the minute size of the vessels in some tissues, as nerves and muscles, may be the reason why these tissues are so little liable to become the seat of inflammation. A fact observed by Dr. Bruch is somewhat in favor of this view; for he found that although some parts of the muscular walls of the intestines were reddened from the vessels being injected, and from coloring matter having transuded their coats, yet none of the vessels presented the varicose appearance found in the vessels of the inflamed portion of the peritoneum.—*Med. Gaz. from Schmidt's Jahrbücher.*

Contributions to the Statistics of Valvular Disease of the Heart, especially with reference to Affections of the several Orifices, and the particular Effects of certain Recognized Causes. By A. WHYTE BARCLAY, M. D.—The facts which form the basis of this paper have been collected chiefly from the Museum Records of St. George's Hospital. The author has confined his attention to the cases which have occurred within the two last years. During that period there have been 535 deaths in the hospital, and in the records of the post-mortem examinations in 419 of these cases, the condition of the circulating organs has been recorded. In seventy-nine cases valvular lesion was found.

In an elaborate statistical table the author exhibits the following facts with regard to each of these seventy-nine cases. The condition of the valves, aortic and mitral; the age and sex of the patient; the existence or absence of atheroma in the aorta; the previous existence or not of acute rheumatism; the state of the heart as to size, thickness of walls, &c.; the state of the pleura and pericardium, as to recent inflammation or old adhesions; the state of the kidneys; other disease found in the body; and the chief cause of death. The author institutes a minute comparison of the 79 cases, and of the remainder of the 419 cases, with reference to these points; and remarks, in conclusion, that some of the deductions seem to him "worthy of attention, and demanding at least further investigation. The liability to double valvular disease (rather than disease of either the mitral or aortic valve separately) in consequence of rheumatic endocarditis, and the early incursion as well as the commonly early termination of that disease,—the limit put by age in so marked a manner to fibrinous deposit on the valves of the heart,—the very large proportion, amounting to almost one-half, of the fatal cases of granular kidney found coincident with valvular disease, and its comparative rarity in those cases in which the kidney is large and mottled, are all facts clearly established with regard to these cases. To others must be left to determine whether they hold good in their more general application.

One commonly received opinion these cases contradict—viz., that atheromatous disease affects by preference the mitral valve; and another is at least doubtful—viz., that it is in the advanced stage of Bright's disease that endocarditis is liable to occur, unless we admit a form of endocardial inflammation without fibrinous deposit.—*Med. Gaz.*

—

"*Ochlesis,*" *or the Disorder generated by the Accumulation of the Sick.* By George Gregory, M. D. (*Med. Gaz.*)—The author designates the general condition of disease produced under these circumstances, by the term "ochlesis," derived from οχλος, a crowd. The normal type of the disorder is erysipelas of the face; but there is a vast number of allied affections which appear at different times with it, either separately or in combination. These are, erysipelas of the extremities, especially affecting wounds or sores; trails of erythematous redness, following the course of the chief absorbent trunks, and terminating in abscesses; cellular inflammation of the lower limbs, or phlegmasia dolens; cellular inflammation of the neck, leading to abscess, cynanche, otitis, glossitis; inflammation of the joints, terminating in purulent effusion; spontaneous gangrene of the genitals and of the extremities; gangrene supervening upon wounds or sores; spontaneous gangrene of some portion of the trunk of the body, especially in new-born children; gangrene of the umbilicus. Instances of pure fever, of a low type, from the same source, are not uncommon. Diarrhœa sometimes is the result, from the mucous membrane of the bowels becoming affected; and in the wards of lying-in hospitals, the "ochletic" miasm expends all its virulence on the peritoneum. The author has seen an asthenic form of laryngitis produced by the same cause, and believes that the pneumonia which springs up in hospitals has likewise its source in the contagious ochletic miasm. This miasm, too, he thinks, produces the excessive depression which attends the worst cases of sea-scurvy, and he has seen it occasion, in the Smallpox Hospital, a state resembling, in all respects, scurvy itself. All the disorders originating in the ochletic miasm are characterized by a low condition of the vis vitæ, and intractability. The experience of the Smallpox Hospital during many epidemic visitations, especially in the years 1842, 1844, 1847, and 1848, has convinced the author of the fact that all the diseases which he has enumerated may arise from the same miasm. Contagious peritonitis is perhaps the only form of the ochletic malady that he has not seen at that hospital during the last twenty-five years; but he regards it as quite certain that this is "part and parcel" of the same disease. The chief agent in the production of ochlesis is, certainly, the crowding together of the sick in one spot; but matters are made much worse by unfavorable locality, by dampness of the surrounding soil, imperfect drainage, or choked sewers, by deficient ventillation, by the character of the cases congregated, by neglect of personal cleanliness, by the employment of unpurified bedding, and by inefficient purification of the wards. Since, however, the ochletic miasm is evolved only at certain times, a peculiar but unknown condition of the atmosphere must concur towards the actual result. The ochletic miasm appears to attach itself strongly to the walls and floor of the apartment: hence, the use of covering the floor with a mixture of quick-lime and water, of lime-whiting the walls, of fumigating with nitric acid or chlorine, &c. The great means of checking the development of ochlesis, however, is to restrict the admission of patients, and to leave the infected ward unoccupied for a certain time.

—

Involuntary Nocturnal Micturition, (Proceedings of the London Med. Soc.—Dr. Willshire made some remarks on nocturnal involuntary discharges of urine in young boys of about four or five years old, and also occurring in young women, about twenty or twenty-two. He observed that it was a very troublesome and tiresome complaint, and one in which medicine was of little or no use, sometimes continuing for several years. The urine was not altered in character. He thought it depended on irritation of the neck of the bladder, and during sleep the power of the mind being removed, the urine escaped. He had used tincture of henbane and alkalies with some benefit, and also blisters or sinapisms to the sacrum, which appeared to do good as long as the irritation on the sacrum continued. He had seen no benefit from the use of nitrate of potassa or benzoic acid, which had been highly recommended by Continental writers. He had sometimes seen tincture of cantharides of use, when given until pain in the stomach was produced, and opium was of use as long as its narcotic effect continued.

Dr. Shearly thought camphor of great service in these cases.

Dr. Coley in the early part of his practice used to apply a blister to the sacrum; but latterly, he had always succeeded in curing the complaint with strychnia; he gave from one-twentieth to one-tenth of a grain to children, and he had always found it successful without any external applications. He thought that it was caused by paralysis of the neck of the bladder.

Dr. Rowland said, that in children it was often connected with the second dentition. In these cases we must attend to the gums, and give purgatives. In young women it was hysterical, and camphor and henbane were useful; the sesquioxide of iron and arsenic were also sometimes useful. The complaint often disappeared without treatment.

Mr. Pilcher.—This complaint has been attributed to paralysis of the sphincter vesicæ. Is there such a muscle?

The President inquired if the complaint occurred in all classes of society?

Mr. Hird said it did, and mentioned the case of a lady, the wife of a clergyman, who had had two or three children, who had been subject to it for three or four months. She was hysterical, and ammoniated tincture of valerian, with camphor and iron had been of use. In children, he thought it often occurred during the second dentition, and lancing the gums, the cold bath, and muriated tincture of iron, were the best remedies. The existence of a sphincter vesicæ he thought proved by an article in the "Cyclopædia of Anatomy," written by Dr. Harrison, of Dublin, for which Mr. Hird made some of the dissections; and afterwards, the late Mr. Fred. Tyrell, clearly proved it in a lecture at the College of Surgeons.

Mr. Pilcher said Mr. Tyrrell proved just the reverse, that there was a strong firm elastic tissue, but no muscle.

Mr. Fisher thought it was Sir Astley Cooper who gave the lecture on this subject.

Mr. Pilcher was quite sure that Mr. Tyrrell declared his conviction from dissections that there was no such muscle. Sir A. Cooper agreed with him, but Sir Astley's lecture was long before. Dr. Willshire's observation as to the effect of opium, would prove there was no muscle, as it acted by relieving the irritation caused by the bladder being partly full.

Mr. Robarts said that Dr. Willshire's remarks reminded him of the opinion of Sir Charles Bell, that enuresis was caused by the peculiar irritability of the trigon of the bladder; the patient lying on his back, the urine irritated this part; the patient should be made to lie on the side, and a blister to the sacrum would oblige him to do so. The best remedies were muriated tincture of iron and cold bathing. He had seen it caused by calculus.

Dr. T. Thompson had seen a combination of muriated tincture of iron, tincture of cantharides and paregoric, very effectual in almost all cases where separately they did littl good.

The President said that Mr. Robarts' remark as to calculus producing enuresis was important, and mentioned a case presenting the symptoms of calculus, and the urine passed involuntarily in bed, but no stone being detected when he was sounded, calomel and jalap were given under the idea that there might be ascarides; a tape-worm was passed from the bowels, and the symptoms disappeared. In some cases colchicum, wine, and liquor potassæ are of use; in others sulphate of quinine or iron. He thought it was oftener observed amongst poor children than in the higher classes.

Dr. T. Thompson thought the similar way in which the rectum and bladder are affected in injuries to the spine, proved the existence of a sphincter.

Mr. Robarts mentioned a case which he saw some years ago, in which the spinal cord was cut across by a tumor; incontinence of urine came on, and constipation of bowels. Tincture of cantharides was given.

Dr. T. Thompson said, emotions of the mind could only act on a muscular sphincter, not on elastic tissue.

Mr. Pilcher said the effect of the injuries to the spine was to cause retention of urine, the urine only dribbling off when the bladder is distended; his opinion was, that there is no sphincter: he thought it much more likely that emotions of the mind should affect the detruser, a voluntary muscle, than the sphincter, which must be an involuntary one; the physiology of the bladder proved it to be a mechanical not a muscular sphincter. Incontinence of urine was a rare affection; irritation in the bladder or of the detruser muscle might cause it. In poor children, he thought the complaint a bad habit, acquired by the neglect of nurses, the urine collecting in the bladder too long. It would be observed that the bladder contracts at the same time exactly each night, and if the child is taken up before that time, the involuntary discharge was prevented.

Mr. Hird inquired if Mr. Pilcher thought the action of tincture of lyttæ or strychnia would be to allay or to increase irritability of the detruser muscle.

Mr. Pilcher thought they might allay irritability, but he would trust more to precautionary means than to medical treatment.

Dr. Willshire did not agree with Sir C. Bell's opinion, as many of the worst cases occurred in children when lying on the belly. Opium constipated the bowel, not by its effect on the muscle, but by its sedative effect on the bowel itself, and it might affect the bladder in a similar manner. In some cases by narcotism the habit was broken for several nights, yet it returned when the opium was discontinued; if habit was the cause of it, would it go on after the child was whipped, punished, and frightened in different ways?

Mr. Dendy thought there were muscular fibres at the neck of the bladder, if not a distinct sphincter; the effect of cantharides would be stimulant if it was only an elastic tissue, causing discharge of the urine, not retention. In the rectum the position of repose of the sphincter was contraction; the effect of a blister would be to cause contraction of the sphincter: the treatment must depend on the causes producing the complaint. In some cases a quill applied over the urethra, and secured by strapping, has a good effect.—*Lancet.*

SURGERY.

On the Causes of Death in Secondary Amputations. By Dr. Fenwick. (*Edin. Med & Surg. Jour.*)—In analyzing the causes of death in secondary amputations, it was found that, whilst the patients undergoing that operation were not so liable to inflammatory affections as those suffering amputation immediately after the receipt of an accident; yet, that they were more likely to sink from exhaustion than cases of pathological amputation, and that this, in fact, constituted the chief danger of the amputation when performed at a considerable distance of time from the accident. From this we might be led to conclude, that the period of life in which the reduction of the strength of the patient by disease has the greatest effect in preventing subsequent inflammation, and, at the same time, that period in which the greatest power of resisting shock existed, we should find the most favorable for the secondary amputations; and this supposition Dr. Laurie's statistics confirm. Between 20 and 30 years of age, no deaths occurred out of 7 secondary amputations; whilst before that period, in which we found the shock had so deadly an influence, 7 died out of 13, or one in every 1·85. Between 30 and 50 years of age, during which deaths most generally occurs from secondary inflammation, whether the operation be performed for traumatic or pathological causes, 12 died out of 16 cases of secondary amputation, or 1 in 1·33: whilst, beyond 50 years of age, of 8 cases, 6 also died, or 1 in 1·33. From 20 to 30 years is the age, then, at which we gain most by deferring, for the longest time, an amputation for an accident, both because the reparative process is most active at that period, and therefore there is a greater chance of a natural recovery, and also because there is less danger than at other times of life of the patient's sinking from exhaustion immediately after the operation; whilst by the continuance of suppuration, the chance of the secondary inflammations to which that age is liable after amputations, is removed. In patients below 20 years of age, we should remove the limb at an earlier period if there seems but small probability of a natural recovery from the accident; because there is less power in persons at that time of life of surviving the shock of the amputation, if it be long deferred, and we gain less in other respects by delay, on account of the small chance of the occurrence of phlebitis, or other secondary inflammations, after the amputation, when performed on persons of that early age.

But the question arises, at what age are persons suffering compound fractures of the limbs least likely to reach that period when amputation can be safely employed? From an analysis of a number of such accidents to the lower extremities, I found that, of persons below 20 years of age, 3 died out of 24, within the fourth and twenty-first day after the infliction of the injury. In none of these, therefore, could any chance of a favorable result, after amputation, have existed, otherwise that operation would have been attempted. Of 22 cases of compound fracture, between 20 and 40 years of age, 4 died, or 1 in 5·5; whilst of 20 cases who were between 40 and 60 years, 2 perished, or 1 in 10; and of 4 persons above that time of life, none died. It should be therefore borne in mind, in attempting to save a dangerous case of compound fracture of the leg, without amputation, when the person is between 20 and thirty years of age, that there is less chance of a patient reaching the period of suppuration, when secondary amputation, if required, is most successful; although if that operation can be performed, there is a greater probability of recovery than if it were performed upon a person below 20 years of age.

—

Scirrhous Lymphatic Gland.—(Prov. Med. & Surg. Jour.)—Mr. Bree, Secretary of the Suffolk Branch of the Provincial Medical and Surgical Association, has recently detailed a case of "scirrhous deposit," affecting primarily and solely the lymphatic gland of the right axilla, in a lady aged 60. The tumor has been seen by Sir B. Brodie, and Mr. Aston Key, and was removed by the latter gentleman. The physical character of the tumor previous and subsequent to the operation, and its microscopical examination afterwards, left not the slightest doubt as to the nature of the affection. In his remarks upon the case, Mr. B. said that it was one of extreme rarity. Scarpa denies its existence. Prof. Walsh records but one case in his classic work.

—

Dislocation of the Head of the Femur on the Dorsum Ilii, in a Child Three-and-a-half Years Old.—(Provincial Med. & Surg. Jour.)—Mr. Image recently communicated the particulars of the following case to the Suffolk Branch of the Provincial Medical and Surgical Association:

William Colley, aged 3½ years, of Ixworth, Suffolk, was admitted into the Suffolk Hospital, May 6th, 1847, with dislocation of the head of the femur on the dorsum ilii. The accident had occurred twelve days prior to his admission.

The accident appears to have been produced by his sister jumping upon his shoulders, from a step above that on which her brother was standing. When I first saw him, the left great toe was resting on the instep of the opposite foot, and the knees crossing over the lower third of the right femur. The limb was an inch and three quarters shorter than the right. He was a remarkably fine healthy child. Soon after his admission, reduction was attempted for a considerable time, but unsuccessfully, as we were not able to fix the knee-strap sufficiently tight to bear the long-continued extension.

May 7th. Having obtained a proper sized knee-strap, and having nauseated our little patient with tartar emetic, and put him into a hot bath, we again applied the pulleys, and after ten minutes succeeded in reducing the dislocation. The bone passed into its natural situation without the slightest jerk or sound. The limb now assumed exactly the same appearance as the other, the shortening being entirely removed. The thighs were kept tied together for a week, and on the 18th of May he walked out perfectly well.

I have ventured to lay the above case before the Society, in consequence of a charge having been urged against a neighboring surgeon, of pretending to reduce a dislocation of the femur on the dorsum ilii, in a child only four years old, that child being a pauper and chargeable to the parish. It was agreed, and proved by authorities, that no such case was recorded, and therefore had not occured, and that seven years' old was the earliest period at which this accident had taken place. On being referred to, I was rejoiced to have it in my power to lay before the proper authorities the above case, which was submitted to some leading surgeons in London, who admitted its perfect possibility, although it was considered to be a very rare occurrence.

Dry Gangrene of the Lower Extremity occurring in a girl ten years old. (*Prov. Med. and Surg. Jour. for July* 26, 1848.)—Mr. James Cooper, of Filby, near Yarmouth, related the symptoms of this case, which occurred in a girl ten years of age. The girl was of a generally healthy habit, spare, of nervous temperament, and had been subject at intervals to attacks of nausea and vomiting, with palpitation of the heart. On the 10th of April last, (having had one of these attacks the day previous,) she was seized with pain and swelling in one finger; on the 13th with numbness of the legs and hips, especially the left. After a while these left her, but the pain subsequently returned most severe in the right foot, which became cool and livid from the foot to the knee, slightly swelled, of diminished temperature, with some pain on pressure. Leeches, &c., were applied.

On the 17th, the leg was much the same. She had an attack of vomiting this day. The sensation of the limb subsequently became more and more impaired, and the limb more livid. Afterwards there commenced all the symptoms of dry gangrene of the limb, extending as high anteriorly as the middle of the tibia; and posteriorly above the ankle the line of demarcation formed, and vesication appeared.

June 9th. She had no appetite, hectic, considerable discharge from the limb, and no pulsation could be detected in the femoral or popliteal arteries. It was, consequently, deemed necessary to amputate the limb, which was done, and the patient subsequently recovered.

Mr. J. G. Johnson, in trying to account for the occurrence of the disease in so young a subject, thought it must, in the beginning, have been a disease in the arteries—that it was the result of arteritis. And he related some cases that had occurred under his observation, where, in treating the case with this view, upon antiphlogistic principles, he had been successful in allaying the symptoms.

[This girl, and a boy of the same age, whose case is reported by Mr. Dayman, of Milbrook, in the *Provincial Journal* for 1846, p. 302, are, probably, the youngest subjects in which spontaneous gangrene has been known to occur.]

Fracture of the Neck of the Femur.—By Prof. Sands Cox, Queen's Hospital, Birmingham. (*Prov. Med. & Surg. Jour.* for July 12, 1848.)

Sarah Shaw, aged 57, housekeeper, was admitted into the Queen's Hospital on the 9th of April, 1846, under the care of Professor Cox. It is stated that she fell down upon the footpath, and struck the upper and outer part of the right thigh with great violence.

On examination the limb was found shortened, and the foot inclined outwards; there was free motion in all directions, but it was painful, more particularly when the knee was carried inwards. During these motions crepitus was distinctly felt; there was considerable swelling and ecchymosis, and the diagnosis was —fracture of the neck of the thigh bone without the capsular ligament. After a few days the limb was placed upon a double-incline plane; and she was discharged cured, walking but slightly lame, on the 15th of July, 1846.

Remarks.—Various are the means which have been resorted to in treating fractures of the neck of the thigh bone within the ligament, for the purpose of producing bony union, and all without avail. Some use the double-incline plane: another method is to place a board at the foot of the bed, upon which the foot of the sound limb is supported, so as to prevent the descent of the body, and a weight is suspended to the other foot, and hung over the end of the bed, so as to keep up regular extension; another method is to bind both legs together, so as to make one limb preserve the extension of the other. The best method is to place a pillow under the whole extent of the limb, and to keep the patient very quiet till all inflammation and pain has subsided; then the patient should rise daily and sit in a chair, and afterwards walk with crutches until the ligament becomes thickened and the muscles increased in power.

In the treatment of the above case, the indication was to keep the bones in apposition, and no plan has been more successful than that adopted in this instance. The double-incline plane was used in order that the patient might lie in as easy a position as possible, to keep up easy and regular extension, and the strap around the pelvis was to press the trochanter towards the acetabulum.

I have lately seen the patient, and she follows her employment as housekeeper to a gentleman; and although it is a little shortened, she has a strong and useful limb.

In reference to this case, I insert an original letter from the late Sir A. Cooper, Bart.:—

"*Hemel Hempstead*, June 10, 1835.

"My dear Sir,—The fracture of the neck of the thigh bone within the capsule, which I call the internal fracture, certainly remains ununited by bone in a large proportion of cases, but as I have mentioned in my work on 'Dislocations and Fractures of the Joints,' there are a few exceptions to this rule, but they are very rare. One exception is, when the reflected ligament on the neck of the bone is not torn through, of which I have a beautiful specimen given me by Mr. Swan, of Lincoln, and now of London, in which the neck of the bone had been cracked through, and twisted upon its axis; but it was not separated, and it is firmly united by bone, and it was curious that no surgical means were employed, and yet the cure took place in a very short time. In oblique fractures, in part within, and in part without. the capsular ligament, an ossific union will occur, but this is not truly an internal fracture. In young persons in which the limb was not shortened, and yet in which fracture was suspected, I should apply a pad to the hip, and support it by splints, and place the thighs over an inclined plane. But these are exceptions which rarely occur; it is the principle for which I contend, namely, that the fracture of the neck of the thigh bone, as it occurs in persons of advanced life, does not unite, and that attempts to make it do so, are useless in practice, and mistakes respecting the reparative process. In old persons the bone undergoes an interstitial absorption, which is the cause of the fracture of the cervix from slight injuries, and immediately after the accident the bone is drawn up, and widely separated from the other. This altered state of the neck of the bone from age, and the difference which exists in the articular extremities from the shafts of bones, in having no periosteum but only a reflected ligament, indisposes the bone to ossific union. In fractures of the shafts of bones the muscles draw the fractured ends together, and the union is produced by the periosteum coating the bone with earth, as well as the cancelli forming new bone; but this is not the case in articular bones. For example, the patella has no periosteum, and that its natural mode of union is by ligament, is seen in experiments on dogs, hares, or rabbits, in which it uniformly unites by ligament, which nature knows is best calculated for motion; but the foolish surgeon squeezes down the bone, and uses complicated bandages to effect, in opposition to nature's wishes, an union by bone when his object ought to be only the production of a *short ligament.* The neck of the thigh bone is governed by the same laws. Nature's object is to produce a ligamentous union as being best calculated for future motion: and the surgeon who is ignorant of nature's object, tries to effect an ossific union.

"A base attempt has been made to fix upon me the opinion, that fracture of the neck of the thigh bone never united by bone; nothing is more false, for I have expressly in my work given the exceptions. Time is the only test of truth, and my professional brethren are now of opinion, that the union of the neck of the thigh bone, as a general principle, does not occur, and therefore are now giving up their absurd and even dangerous attempts. As to the specimens of union of the neck of the thigh bone in Paris, the French surgeons confound the internal with the external fracture. I have seen the museums of Paris and Germany, (1828 and 1830,) and they then did not contain any specimens of the kind, at least I did not see any, but they may have now one or two, as they will occur under the circumstances I have mentioned. You may do with this letter as you please.

"Believe me always, yours truly,

"William Sands Cox, Esq." "ASTLEY COOPER.

MIDWIFERY.

Case of Unavoidable Hemorrhage—Successful Operation of Transfusion.—By DR. WALLER.—The following interesting case occurred in the practice of Mr. Greaves. Hemorrhage appeared to an alarming extent in the eighth month. The patient appearing in a desperate state, Dr. Waller's assistance was requested. He found her in a very unpromising state, with a completely blanched countenance, pale and livid lips, cold extremities, laborious respiration, and a pulse scarcely perceptible; the general surface of the body was also cold. In short, everything indicated approaching dissolution. Stimulants had been freely given, but they failed to excite even a temporary rally. The vagina was filled with coagula; and, as the hemorrhage appeared to have ceased, he did not think it advisable to disturb the clots in attempting delivery. Stimulants were again had recourse to, but with no better effect. The symptoms of exhaustion increased, and nothing but transfusion, seemed, under these circumstances, to hold out the slightest chance of relief. Mr. Greaves concurring in this opinion, preparation was made for its performance. The first intention was to have laid bare the vein, and to have had all things in readiness, then to have delivered, and, provided there had been no improvement in the condition of the patient, to have transfused immediately afterwards. A little reflection convinced the operators that this plan would be fraught with danger; for, had syncope occurred, in all probability it would have been fatal. The operation was, therefore, at once commenced. When about five ounces of blood had been introduced, the amendment was evident; the pulse was more perceptible, and the countenance assumed a somewhat better aspect. The blood now flowed very sluggishly from the arm of the female who supplied it; it was, therefore, determined to wait awhile and watch the effects, nourishment and stimuli being administered occasionally. The rally continued for about two hours and a half, when the female again began to sink, and jactitation supervened; gruel, with brandy, was given without any benefit; the pulse was again but just perceptible, and the body getting cold. Dr. Waller again injected about four ounces of blood from the same individual who had previously supplied it; but this time the symptoms did not improve. The stream issuing from the punctured arm was so languid that it was not thought right to proceed, and a fresh subject was sought to furnish them with a better supply. The husband of the patient, being in the room, came forward to their aid; he looked rather pale, and, therefore, they gave him a glass of hot spirits and water, and then opened a vein, from which the blood flowed in an impetuous stream. The first injection of about two ounces produced a marked alteration in the pulse; it became decidedly perceptible. When nine ounces had been injected, the countenance was much improved; there was even a slight appearance of color in the cheeks, and pain in the arm was complained of. Four ounces more were introduced, when all symptoms of immediate danger vanished. There was no faintness afterwards; the surface was warm; the pulse steady, about 100 in the minute; jactitation ceased; and nourishment was retained on the stomach. The only complaint was of excessive fatigue, with inclination for sleep; there were also a few "grinding pains." Dr. Waller visited her again in about an hour and a half. She had been dozing, and was extremely tranquil; re-action was perfect, and there was no hemorrhage, no tumult in the circulation. He now left the case in the hands of Mr. Greaves, who afterwards informed him that, after a sleep of some hours, the pains increased, and he felt a portion of detached placenta in the vagina; this was expelled by the natural efforts. A dead child soon followed, the remainder of the placenta coming away an hour afterwards, without hemorrhage. The mother recovered.

[The failure of the second injection from the original person to rouse the patient when the "stream issuing from the punctured arm was languid," and the instantaneous success derived from the freely flowing blood from the husband's arm, are suggestive of valuable propositions, which should not be lost sight of in practice.]—*Ranking's Abstract from Med. Times.*

Rupture of the Unimpregnated Uterus.—M. Gozzo, of Naples, narrates the following extraordinary case:—A woman, aged 34, the subject of dysmenorrhœa, and sterile, was examined. The uterus was felt above the pubis, as large as at the fifth month, but perfectly destitute of in qualities of its surface. The uterus continued to increase until its fundus reached the xiphoid cartilage; the menstrual discharge was irregular, and followed by considerable leucorrhœa. She was shortly seized with symptoms of intestinal obstruction, from which she was recovering, when she was suddenly seized with collapse and abdominal pain, and died in less than twenty-four hours.

After death the peritoneal cavity was found to be almost filled with pus, mingled with serous fluid and fœtid gas. The uterus adhered to the lateral parts of the abdomen, from the pubis as high as the umbilicus, filling the iliac regions; it was covered by the large omentum. The intestinal surface was irregular, and covered with fungous excrescences and tubercular masses of various sizes and forms, its cavity being filled with a white inodorous pus. The uterine walls were thickened, and contained several small abscesses, some of which were close to its peritoneal surface. The posterior aspect of the organ exhibited a rent, through which the matter had escaped into the abdomen. An encephaloid tumor was likewise found occupying the lower segment of the uterine surface.—*Provin. Med. & Surg. Jour. from Archives Générales,* Mars, 1848.

Medicated Pessaries.—The following are those chiefly used by Dr. Simpson:—

Zinc Pessaries.—R. Zinci Oxidi, dr. j.; Ceræ Albæ, dr. j.; Axungiæ, dr. vi. Misce et divide in pessos quatuor.

Lead Pessaries.—R. Plumbi Acet., dr. ss.; Ceræ Albæ, dr. iss.; Axungiæ, dr. vi. Misce.

Mercurial Pessaries.—R. Unguent. Hydrarg. Fort. dr. ij.; Ceræ Flavæ, dr. ij.; Axungiæ, oz. ss. Misce.

Iodide of Lead Pessaries.—R. Plumbi Iodidi, scr. j.; Ceræ Flavæ, scr. v.; Axungiæ, dr. vi. Misce.

Tannin Pessaries.—R. Tanninæ, scr. ij.; Ceræ Albæ, scr. v.; Axungiæ, dr. vi. Misce.

Belladonna Pessaries.—R. Extr. Belladon, scr. ij.; Ceræ Flavæ, dr. iss. Axungiæ, oz. vi. Misce.—*Monthly Journal*, June, 1848.

—

Case of Imperforate Vagina at the time of Labor. By Dr. J. Ogden, Manchester. (*Brit. Rec. of Obst. Med.*)—The patient had been married ten years. At the age of nineteen she was operated upon for imperforate vagina, producing retention of the menses; the opening closed, and she menstruated by the meatus urinarius. On being called to the case, Dr. O. learnt that it was her first labor, and on making an examination, could find neither labia, nymphæ, clitoris nor vagina; he could only find a flat, hard tumor, resembling the top of the fœtal head. On discovering this state of things, he says:

> I immediately despatched a messenger for my scalpels, and on receiving them, made an opening of considerable extent, as large as the rectum and meatus urinarius would admit of, without injury to the parts. I was greatly surprised to find the barrier, or intervening substance which I had to penetrate, fully an inch and a half in thickness. The membranes were unavoidably severed in the operation, and a considerable quantity of water was evacuated. In about an hour after the section had been completed, she gave birth to a still-born, moderately sized male child, during the expulsion of which, great care was required to prevent laceration, which caused much anxiety to avert. About two years after the accouchment, I was again called in, to attend her, at the full time of utero-gestation. I found the vagina thick and unyielding, and which would, with the greatest difficulty, allow of the admission of two fingers only; the os uteri fully dilated; pains severe, and recurring at short intervals. I waited six hours, in hopes of the vaginal contraction yielding a little; but eventually ascertaining the impossibility of it, I determined, as before, to assist the expulsion by opening the vagina with the scalpel. This I accomplished with the greatest care, first introducing a catheter into the bladder, as a guide to prevent injury to that organ, and then making use of my finger per anum, in performing the section towards the rectum. In about an hour, at imminent risk of laceration, with the aid of the vectis, I succeeded in extracting a full grown, living female child.
>
> After the birth of this her second child, I saw Mr. Grime, who had removed to Manchester, and elicited from him the following facts, regarding the operation, which he and Mr. McMaith had previously performed upon her. After expressing his surprise and astonishment at her being impregnated, he stated that he, in consultation, attempted to open the vagina with a lancet, for retained menses; but finding the intervening substance so thick, was compelled to resort to the scalpel. After cutting to the depth of an inch and a half, they were much surprised by a gush of water issuing from the wound, and on opening a little farther, they succeeded in evacuating a quantity of thick grumous blood, and agreed to introduce a canula to keep the opening pervious: this, however, was not retained long; and supposed the opening closed, but had not heard of her since. When I related the accounts of her different accouchments, he remarked, that the escape of water during the operation he performed, could never be accounted for, either by himself or his colleague; but that now he was quite convinced that the meatus uri-

narius, in the upper part of the vagina, must have been opened, and remained pervious; and through this she must have menstruated, and become impregnated. This also is my opinion, as it could not have occurred in any other manner.

I have consumed much time in searching the works of ancient and modern writers for records of similar cases, but without avail, and have also particularly inquired of my medical friends if they were cognizant of such cases occurring, or remembered having met with them in their various readings; but with a similar result. I have not succeeded in obtaining any proof that the like ever before occurred, or has been recorded in any book.

MISCELLANEA.

Progress of Cholera.—The *London Medical Gazette*, for July 14th, 1848, contains the following editorial in regard to the present appearance of the disease:

"We regret to find, from the reports in the foreign journals, that the Asiatic cholera is rapidly extending through the southern and western parts of Russia. It is now prevalent throughout Moldovia and Wallachia. At Galatz, the population of which is estimated at 40,000, it appears that there have been since February, 746 cases, and 237 deaths. In Moscow, the disease has again broken out with redoubled virulence. and appears to set at defiance all kinds of medical treatment. In two days there were 222 cases, and more than one-half had proved fatal. The fact of most interest to us in reference to its progress westward, is its appearance at St. Petersburgh. This had been frequently rumored during the early part of the spring, but the intelligence is now confirmed; and it would appear that the fatality of the disease has even been greater than in Moscow. Up to the 24th June, there had occurred in the Russian capital no less than one thousand cases, of which more than one-half had proved fatal. As in 1831–2, the malady may continue to extend to the maritime ports of the Baltic, and so across the German ocean to our own shores."

Professor Syme.—The London Medical Gazette, of May 19, announces the resignation of Mr. Syme as Prof. of Surgery, in University College. The reasons specified for his resignation was his unwillingness to become involved in the differences which are known to exist between some of the members of the faculty of said college. The same journal for May 26th, states that as soon as his resignation was known, a general meeting of the students of University College and Hospital, was immediately called; the meeting was numerously attended, resolutions expressing deep and profound regret at Mr. Syme's resignation, were unanimously passed. After which a deputation was sent the same evening to represent to him the feelings of the meeting. By a recent number of the Monthly Journal, we learn that Prof. Syme has returned to Edinburgh, and that he has been allowed by the crown to withdraw his resignation of the chair of Clinical Surgery, in the University of Edinburgh, which he sent in previous to the occasion of his accepting the Professorship of Surgery in University College London. He will accordingly resume his duties in the Edinburgh University, the coming session.

Revolutionary Attack on a Prof. of Chemistry.—The Parisian insurgents, in carrying out their views of liberty, attacked the house of an eminent chemist in the Faubourg St. Marceau. They insisted that he should immediately prepare gun-cotton for their use. For twenty-four hours he resisted this attempt on the part of the revolutionists, informing them that he had not the materials for the purpose. These were, however, immediately procured. Muskets were pointed at the chest of the professor, and the lives of his wife and daughter were equally threatened, and under these circumstances he was compelled to set about the preparation of gun-cotton. He had prepared only a small quantity when the quarter was taken possession of by the government troops; and he and his family were thus rescued from the perilous position in which these friends of liberty had placed them.—*Lond. Med. Jour. from L'Union Med.*

Medical Schools of Portugal.—From the London Medical Gazette for June last, we learn that the total number of students in the medical schools of Portugal, during the current year, amounts to 148. Of this number, there are 98 at Lisbon, and 50 at Oporto.

A Statue of Liston.—We see by the London Medical Gazette, that a large number of noblemen and gentlemen have formed themselves into a committee, for the purpose of establishing some public and lasting testimonial to the memory of the late Mr. Liston. It is proposed to erect a statue in some public situation and also to found a gold medal, to be called the *Liston Medal*, to be awarded annually as the council of University College may decide. The subscriptions already made up, amount to upwards of £650.

The Wounded in Paris. (*Med. Gaz. for July* 14.)—According to a circular published by Mr. Thierry, it appears that the late struggle for "liberty, equality, and fraternity," was attended with the following results. From the 23d to the 28th of June, there were received into the Hospitals 1781 cases of wounds; but of these, 162 were dead when they were brought in. In addition to these there were in five days 195 deaths. On the 29th of June, there remained in the Hospitals, 1267 wounded; and in the temporary ambulances 369, making a total of 1631 persons still under treatment.

Re-Vaccinations in the Prussian Army in 1847.—The total number of men vaccinated was 43,264; the number of those who bore marks of a former vaccination in a decided manner, 34,264; ditto with the marks not very distinct, 6,405; ditto with marks not visible at all, 2,927. The vaccine virus developed itself satisfactorily in 25,544; very irregularly in 7,425; and not at all in 10,627. The vaccinations which had yielded no results were repeated; they acted in 2,718; and failed entirely in 8,952 cases. In consequence of the present vaccination, there were developed from one to five vaccine pustules upon 13,295; from six to ten upon 8,164; from eleven to twenty upon 5,767; from twenty-one to thirty upon 1,036 of the men. Amongst those who were vaccinated in the year 1847, there was, within the same year, no case of varicella, none of actual smallpox, and one only of chicken-pox. The lymph was obtained from vaccinated children or grown-up persons. It is remarkable that amongst those who were subjected to re-vaccination there were several who had had the smallpox before, yet upon whom the vaccine matter produced the usual pustules.—*Lancet.*

CONTENTS.—No. III.

(NEW SERIES.)

PART I.—ORIGINAL COMMUNICATIONS.

Page

Art. I.—Medical Topography of the City of Mexico. By Robert Newton, M. D., Medical Staff U. S. Army. - 295

Art. II.—On the Anatomical and Physiological History of those Affections which are called Inflammatory. By J. B. Pigne, late Curator of the Dupuytren Museum, Ex-Vice-President of the Anatomical Society, Professor of Pathological Anatomy, etc., etc. - - - - - - 307

Art. III.—On Milk Fever and Abscess of the Mamma. By J. H. Shearman. (Continued.) - - - - 315

Art. IV.—On Inflammation: its Proximate Cause and Methodus Medendi. By J. P. Batchelder, M. D. (Continued.) 322

Art. V.—Report of a Case of Poisoning by Tincture of Aconite—Fatal Result in two Hours. By Henry M. Gray, M. D. 336

Art. VI.—Case of Labor, where Delivery of the Child was accomplished through the Perinæum. By S. C. Ellis, M.D. 339

PART II.—CRITICAL ANALYSIS.

Art. VII.—Lead Diseases. A Treatise from the French of L. Tanquerel Des Planches, with Notes and Additions on the Use of Lead Pipe and its Substitutes. By Samuel L. Dana, M. D., LL.D., Member of the American Academy of Arts and Sciences, Corresponding Member of Boston Society of Natural History; of the Academy of Natural Sciences, Philadelphia; of the Natural Institute at Washington. Lowell: Daniel Bixby & Co., 1848. 8vo., pp. 441. 340

Art. VIII.—Observations on Surgical Diseases of the Head and Neck. Selected from the Memoirs of the Royal Academy of Surgery of France. Translated and Edited by Drewry Ottley. London: Printed for the Sydenham Society, 1848. 8vo., pp. 293. - - - - - - - 346

BIBLIOGRAPHICAL NOTICES.

Art. IX.—A Dispensatory, or Commentary on the Pharmacopœias of Great Britain and the United States; comprising the Natural History, Description, Chemistry, Pharmacy, Action, Uses and Doses of the Articles of the Materia Medica. By Robert Christison, M. D., V. P. R. S. E., President of the Royal College of Physicians of Edinburgh, Professor of Materia Medica in the University of Edinburgh, etc. Second edition, Revised and Improved, with a Supplement, containing the most important New Remedies. With Copious Additions, and 213 Illustrations. By R. Eglesfeld Griffith, M. D., "Author of a Medical Botany," etc., etc. Philadelphia: Lea and Blanchard. 1848. - - - 359

Page

ART. X.—Medical Lexicon: A Dictionary of Medical Science; containing a Concise Explanation of the various Subjects and Terms; with the French and other Synonymes; Notices of Climate and of celebrated Mineral Waters; Formula of various Officinal and Empirical Preparations, etc. By ROBLEY DUNGLISON, M. D., Professor of the Institutes of Medicine, etc., in Jefferson Medical College, Philadelphia. Seventh edition, carefully Revised, and greatly Enlarged. Philadelphia: Lea & Blanchard, 1848. 8vo., pp. 912. 361

ART. XI.—A Practical Treatise on Poisons; their Symptoms, Antidotes, and Modes of Treatment. By O. H. COSTILL, M. D. Philadelphia: Grigg, Elliot & Co., 1848. 16mo., pp. 160. - - - - - - - 362

ART. XII.—The Principles and Practice of Modern Surgery. By ROBERT DRUITT, Fellow of the Royal College of Surgeons. A new American, from the last and improved London edition. Edited by F. W. SARGENT, M. D., Author of "Minor Surgery," etc. Illustrated with one hundred and ninety-three Wood Engravings. Philadelphia: Lea and Blanchard, 1848. 8vo., pp. 576. - - - 363

ART. XIII.—A System of Human Anatomy, General and Special. By ERASMUS WILSON, M. D., Lecturer on Anatomy, London. Fourth American, from the last London edition. Edited by PAUL B. GODDARD, A.M., M. D., Professor of Anatomy and Histology, in the Franklin Medical College of Philadelphia. With two hundred and fifty one illustrations, by Gilbert. Philadelphia: Lea and Blanchard, 1848. 8vo., pp. 576. 363

ART. XIV.—An Analytical Compendium of the Various Branches of Medical Science, for the Use and Examination of Students. By JOHH NEILL, M. D., Demonstrator of Anatomy in the University of Pennsylvania, Lecturer on Anatomy in the Medical Institution of Philadelphia, etc., and FRANCIS GURNEY SMITH, M. D., Lecturer on Physiology in the Philadelphia Association for Medical Instruction, Fellow of the College of Physicians, etc. Philadelphia: Lea and Blanchard, 1848. 12mo., pp. 908. - - 364

ART. XV.—The Ohio Medical and Surgical Journal. Edited by JOHN BUTTERFIELD, M. D., Professor of the Practice of Medicine in the Starling Medical College. Vol. 1st., No. 1., for September, 1848. Columbus: J. H. Riley & Co., 1848. 8vo., pp. 106. - - - - - - 365

ART. XVI.—A Dictionary of Practical Medicine; comprising General Pathology, Nature and Treatment of Diseases, Morbid Structures, etc. By JAMES COPLAND, M. D., F. R. S. Edited, with Additions, by CHARLES A. LEE, M. D. New-York: Harper & Brothers, 1848. 8vo., pp. 144. 365

ART. XVII.—The Principles and Practice of Medicine. In a Series of Essays. By JOHN W. HOOD, M. D. Philadelphia: Thomas, Cowperthwait & Co. 1848. 8vo., pp. 263. 366

ART. XVIII.—Ancient Monuments of the Mississippi Valley. By E. G. SQUIER, A. M., and E. H. DAVIS, M. D. Published

Page
for the authors. New-York: Bartlett & Welford. Cincinnati: J. A. & U. P. James. 1848. 4to., pp. 306. 367

PART III.—EDITORIAL AND AMERICAN MEDICAL RETROSPECT.

British Provincial Medical and Surgical Association. - 368
Editorial Changes. - - - - - - - 369
Professorial Changes and New Appointments. - - ib.
Beck's Elements of Medical Jurisprudence. - - 470
A New Remedy in Acute Dysentery. - - - ib.
Case of Labor with Twins—interesting from its novelty. - 371

PATHOLOGY AND PRACTICAL MEDICINE.

Death following Vaccination. - - - - 372
On the Treatment of Poisoning by the Bite of the Rattlesnake. ib.
Diabetes Mellitus. - - - - - - 373
Acute Glossitis in an Infant—Suppuration—Recovery. - ib.
Hereditary Syphilis in Infants. - - - - 374

SURGERY.

Quack Surgery. Scirrhous Tumor of the Mammary Gland—caustic application—Death. - - - - 375
Chloroform in Surgical Practice. - - - - ib.
Observations on Keloide. - - - - - 376
Case of a Large Tumor involving the Superior Maxillary Bone. ib.

MIDWIFERY AND DISEASES OF FEMALES.

Ovarian Disease—Removal of the Tumor—Recovery. - 378
Singular Case of Uterine Fleshy Mole. - - - ib.
Stricture of the Vagina Coincident with Labor. - - 379
Case of Twins of Extraordinary Size. - - - 380
Prolonged Gestation—A Case in which the Date of Conception was accurately ascertained. - - - - ib.
Superfœtation. - - - - - - 381
Diseases of the Os and Cervix Uteri in the Unmarried. - ib.

MATERIA MEDICA AND PHARMACY.

Adulterated Medicines. - - - - - 382
Internal Use of Chloroform, its Effects, etc. - - 387
On the Effects of, Sub-borate of Soda. - - - ib.
Kreasote in Erysipelas - - - - - 388
Quinine—Effects of, in Inflammatory Affections. - ib.
Sulphate of Quinine—Remarks upon the Action of - - 389
Smart-Weed—A Remedy for Mercurial Salivation and Aphthous Stomatitis - - - - - - 390
Stillingia Sylvatica, Queen's Delight. - - - ib.

MISCELLANEA.

Anatomical Peculiarity - - - - - 392
Code of Ethics of the Philadelphia College of Pharmacy. - ib.
Tying the Internal Iliac. - - - - - 394
The Anniversary Dinner of the Society for the Relief of Widows and Orphans of Medical Men. - - - - ib.

PART IV.—FOREIGN MEDICAL RETROSPECT.

ANATOMY AND PHYSIOLOGY.

Page
On the Blood-Vessels of the Nerves of the Heart. - - 395
On the Composition of the Splenic and Portal Blood. - 396
On the Elastic and Contractile Tissue of Arteries, - 397

PATHOLOGY AND PRACTICAL MEDICINE.

Scirrhus of the Pancreas. - - - - - 399
Contagious Nature of Porrigo Capitis. - - - *ib.*
On the Use of Solution of Caustic Potash in relieving Strangury. 400
Pathology of Intermittent Diseases. - - - - *ib.*
On the Internal Use of Turpentine Oil, in Cases of Hemorrhage. *ib.*
On the Diagnostic Value of Expectoration and Pain in Pulmonary Affections. - - - - - 401
Statistical Researches in Chorea - - - - 404

SURGERY.

Dislocation of the Head of the Femur backwards—Death—Dissection of the Parts; with some Observations on that form of Dislocation. - - - - - 404
On Petit's Operation (the operation without opening the sac) for Strangulated Hernia. - - - - - 405
Amputation—Inhalation of Chloroform—Death. - - 407
Case of Resection of the Scapula. - - - - *ib.*
Tetanus, - - - - - - - 408
On the Value of the different Modes of Treatment of Primary Syphilis. - - - - - - *ib.*
On the Division of the Falciform Border of the Fascia Lata, for Varix of the Saphena Vein. - - - - 409
On the Treatment of Fractures of the Thigh-bone in Infants, in the flexed Position. - - - - - *ib.*
On Amputation and Local and General Etherization in Traumatic Tetanus. - - - - - - 410

MIDWIFERY AND DISEASES OF FEMALES.

Placentitis Occurring Twice in the same Woman. - - 419
Successful Removal of an Ovarian Tumor complicated with Pregnancy. - - - - - 420
A Dicephalous Monster with one head black and the other white. *ib.*
On Vomiting during Pregnancy. - - - - 421

MISCELLANEA.

Number of Medical Students in the Medical Schools of France and Spain. - - - - - - 423
Urea a Natural Ingredient of the Blood. - - - *ib.*
Hunter's Claims to the Admiration of Posterity. - - *ib.*
Tape-worm in Fish. - - - - - - 424
Detection of Human Skin by the Microscope. - - *ib.*
M. Raspail and Medical Democracy. - - - *ib.*
University College, London. - - - - *ib.*
Obituary—Death of Baron Berzelius. - - - 425

TO READERS AND CORRESPONDENTS.

The Communications from Drs. Whiting and Gescheidt, promised in our last, for the present Number, have been necessarily deferred until our next, which will also contain articles from Professors Bedford, Dickson, Drs. Batchelder, Shearman, Hosack, Stimson, and others; and a very interesting report of the "Proceedings of the New-York Pathological Society." These "Reports" will, we are pleased to announce, be regularly continued in this Journal.

No. IV., Vol. 2d., (New Series,) will be published on the first of Jan., 1849.

We acknowledge the reception of the following Books, &c.:—

Illenau die Groszherzoglich Badische Heil- und Pflegeanstalt. Statut, Hausordnung, Krankenwartdienst, Bemerkungen und Nachrichten als Auskunst für Behörden und Angehörige der Kranken. Mit einem Situationsplan. Rastatt, 1847. (From the Institution.)

A Dispensatory, or Commentary on the Pharmacœpias of Great Britain (and the United States); comprising the Natural History, Description, Chemistry, Pharmacy, Actions, Uses and Doses of the Articles of the Materia Medica. By ROBERT CHRISTISON, M. D., V. P. R. S. E., President of the Royal College of Physicians of Edinburgh, Professor of Materia Medica in the University of Edinburgh, and Ordinary Physician to the Queen for Scotland. Second edition; revised and improved; with a Supplement, containing the most important new remedies; with copious additions; and 213 Illustrations. By R. EGLESFELD GRIFFITH, M. D., author of "A Medical Botany," &c., &c. Philadelphia: Lea and Blanchard, 1848; 8vo., pp. 1008. (From the publishers.)

An Analytical Compendium of the Various Branches of Medical Science, for the use and examination of Students. By JOHN NEILL, M. D., Demonstrator of Anatomy in the University of Pennsylvania, Lecturer on Anatomy in the Medical Institute of Philadelphia, &c., and FRANCIS GURNEY SMITH, M. D., Lecturer on Physiology in the Philadelphia Association for Medical Instruction, Fellow of the College of Physicians, &c. Philadelphia: Lea and Blanchard, 1848; 12mo., pp. 908. (From the publishers.)

The Principles and Practice of Medicine, in a Series of Essays. By JOHN W. HOOD, M. D. Philadelphia: Thomas, Cowperthwait & Co., 1848; 8vo, pp. 263.

A System of Human Anatomy, General and Special. By ERASMUS WILSON, M. D., Lecturer on Anatomy, London. Fourth American from the last London edition. Edited by PAUL B. GODDARD, A. M., M. D., Professor of Anatomy and Histology in the Franklin Medical College of Philadelphia. With 251 Illustrations, by Gilbert. Philadelphia; Lea and Blanchard, 1848; 8vo., pp. 576. (From the publishers.)

Medical Lexicon. A Dictionary of Medical Science; containing a Concise Explanation of the Various Subjects and Terms; with the French and other Synonymes; Notices of Climate, and of celebrated Mineral Waters; Formula for various Officinal and Empirical Preparations, &c. By ROBLEY DUNGLISON, M. D., Professor of the Institutes of Medicine, &c., in Jefferson Medical College, Philadelphia. Seventh edition; carefully revised, and greatly enlarged. Philadelphia: Lea and Blanchard, 1848; 8vo., pp. 912. (From the publishers.)

The Principles and Practice of Modern Surgery. By ROBERT DRUITT, Fellow of the Royal College of Surgeons. A new American from the last and improved London edition. Edited by F. W. SARGENT, M. D., author of "Minor Surgery," &c. Illustrated with 193 Wood Engravings. Philadelphia; Lea and Blanchard, 1848; 8vo., pp. 576. (From the publishers.)

An Inquiry into the Degree of Certainty in Medicine; and into the Nature and Extent of its Power over Disease. By ELISHA BARTLETT, M. D., Professor of the Theory and Practice of Medicine in Transylvania University; Member of the American Academy of Arts and Sciences, &c., &c. Philadelphia; Lea and Blanchard, 1848; 12mo., pp. 84. (From the publishers.)

The Nature and Treatment of Deafness, and Diseases of the Ear; and the Treatment of the Deaf and Dumb. By WILLIAM DUFTON, M. R. C. S. Philadelphia: Lea and Blanchard, 1848; 12mo., pp. 120. (From the publishers.)

Ancient Monuments of the Mississippi Valley; comprising the results of Extensive Original Surveys and Explorations. By E. G. SQUIER, A. M., and A. H. DAVIS, M. D. Accepted for publication by the Smithsonian Institution, June, 1847. Published for the Authors. New-York: Bartlett and Welford. Cincinnati: J. A. & U. P. James. 1848. Quarto, pp. 306. (From the Authors.)

Observations on the Pathology of Croup; with Remarks on its Treatment by Topical Medications. By HORACE GREENE, A. M., M. D., &c., &c. New-York: John Wiley, 1847; 12mo., pp. 115. (From the publisher.)

A Dictionary of Practical Medicine; comprising General Pathology, the Nature and Treatment of Diseases, Morbid Structures, &c. By JAMES COPLAND, M. D., F. R. S. Edited, with Additions, by CHARLES A. LEE, M. D. New-York: Harper and Brothers, 1848; 8vo., pp. 144. (From the publishers.)

The following Journals have been received in Exchange.—

The American Journal of Pharmacy, published by authority of the Philadelphia College of Pharmacy, edited by Joseph Corson, M. D., and Wm. Proctor, Jr. for October. (Quarterly. Philadelphia.)

The American Journal of the Medical Sciences, edited by Isaac Hays, M. D., for October. (Quarterly. Philadelphia.)

The American Journal of Insanity, edited by the Officers of the New-York State Lunatic Asylum, for October. (Quarterly. Utica, N. Y.)

The New-Jersey Medical Reporter, and Transactions of the New-Jersey Medical Society, edited by Joseph Parrish, M. D., for October. (Quarterly. Burlington.)

The Medical Examiner and Record of Medical Science, edited by Robert M. Huston, M. D., for September and October. (Monthly. Philadelphia.)

The New-Orleans Medical and Surgical Journal, devoted to Medicine and the Collateral Sciences, edited by J. Harrison, M. D., and A. Hester, M. D., for September. (Bi-Monthly. New-Orleans.)

Southern Medical and Surgical Journal, edited by Paul F. Eve, M. D., for September and October. (Monthly. Augusta.)

The Charleston Medical Journal and Review, edited by P. C. Gaillard, M. D., and H. W. De Saussure, M. D., for September. (Bi-Monthly. Charleston.)

St. Louis Medical and Surgical Journal, edited by M. L. Linton, M. D., John S. More, M. D., Wm. M. McPheeters, M. D., and Joseph N. McDowell, M. D., for October. (Bi-Monthly. St. Louis.)

The North-Western Medical and Surgical Journal, edited by W. B. Herrick, M. D., and J. Evans, M. D., August and October numbers not received. (Bi-Monthly. Chicago and Indianapolis.)

The Western Journal of Medicine and Surgery, edited by D. Drake, M. D., L. P. Yandell, M. D., and F. W. Colescott, M. D. Not received since May last. Monthly. Louisville.)

The Western Lancet and Hospital Reporter, edited by L. Lawson, M. D., and John P. Harrison, M. D. Not received since May last. (Monthly. Cincinnati.)

The Ohio Medical and Surgical Journal. Edited by John Butterfield, M. D., for September. (Bi-Monthly. Columbus.)

Buffalo Medical Journal, and Monthly Review of Medical and Surgical Science, edited by Austin Flint, M. D., for September and October. (Monthly. Buffalo.)

The Boston Medical and Surgical Journal, edited by J. C. V. Smith, M. D. Numbers for September and October received. (Weekly. Boston.)

The Annalist, a Record of Practical Medicine in the City of New-York, edited by N. S. Davis, M. D., for September and October. (Semi-Monthly. New-York.)

The Medical News and Library, edited by ——, for September. October number not received. (Monthly. Philadelphia.)

The New-York Dental Recorder, edited by C. C. Allen, M. D., Dentist, for September and October. (Monthly. New-York.)

The British-American Journal of Medicine and Physical Science, edited by Archibald Hall, M. D., L. R. C. S. E., for September and October. (Monthly. Montreal.)

Dublin Quarterly Journal of Medical Science, edited by ——. August number not yet received. (Quarterly. Dublin, Ireland.)

Monthly Journal and Retrospect of Medical Science, edited by ——. Not received since May last. (Monthly. Edinburgh and London.)

London Medical Gazette, or Journal of Practical Medicine, edited by ——, for September. (Weekly. London.)

The British Record of Obstetric Medicine, Surgery and Diseases of Women and Children &c. &c., edited by Charles Clay, M. D. (Not yet received.)

☞ Communications intended for publication, and Books for Review, should be sent *free of expense*, directed to the Editor of the New-York Journal of Medicine, care of Henry G. Langley, 3 Astor House, Barclay street, New-York. Persons at a distance may direct parcels *paid* as above, under cover, to Lindsay & Blakiston, Philadelphia; or Wm. D. Ticknor & Co., Boston; or John Wiley, Paternoster Row, London. The attention of Correspondents is respectfully requested to the above, as the publisher is frequently subjected to unnecessary expense for postage and carriage.

All remittances of money and letters on the *business* of the Journal, should be addressed to the publisher, Henry G. Langley, New-York.

The advertising sheet belongs to the business department of the Journal, and all communications for it should be addressed to the publisher, under whose exclusive control it is.

THE NEW-YORK

JOURNAL OF MEDICINE.

FOR NOVEMBER, 1848.

PART FIRST.

ORIGINAL COMMUNICATIONS.

ART. I.—*Medical Topography of the City of Mexico.* By ROBERT NEWTON, M. D., Medical Staff U. S. Army.

THIS city is 19° 25′ north of the equator, and 21° 6′ west longitude from Washington. Its latitude places it in the narrower part of the continent. Its direct distance from the gulf of Mexico is 140 miles, and from the Pacific ocean 170.

The city is situated in a valley surrounded by lofty mountains. This valley, called Tenochtitlan, is about 63 miles in its greatest length and 43 in its greatest breadth. The longitudinal direction is from north to south with a slight deviation to the east. Through its length and about in its middle lies a chain of lakes. Beginning with the most northern, they are respectively named, Zumpango, San Christobal, Tezcoco and Chalco. This chain is about 50 miles long. Four miles west of Tezcoco and near its middle, (in the central part of the valley,) is situated the city of Mexico. Lake Zochimilco, were it not separated from Chalco, by a small strip of land, would be a narrow prolongation of that lake, extending towards the capital. These lakes in the aggregate, occupy nearly one tenth of the surface of the valley. Their waters contain in solution, chloride of sodium, carbonate of soda, and of lime, sulphate of soda, with traces of the nitrates of soda and potassa. Chalco and Zochimilco, being much less strongly impregnated with these salts than the others, are called sweet lakes. During and long after the rainy season, the ground to the south and west of the city, is a marsh. The soil of the plain, in the present age, is not very productive on account of the excess of salines, which cover its surface like frost.

The drinking water of the city, is brought in aqueducts from Santa Fe and Chapultepec. It contains a portion of the chloride of sodium and carbonate of soda; and the Chapultepec water has also in solution a good deal of the carbonate of lime.

The altitude of the city above the sea, is 7459 feet. Consequent upon this elevation is a correspondent rareness of the atmosphere. The following table is the result of barometrical observations made during five years by Mr. Rio de la Loza, a scientific chemist of this city. The measurement is by metres.

	Greatest Altitude.	Least Altitude.
January,	.5909	.5879
February,	.5912	.5882
March,	.5902	.5885
April,	.5898	.5887
May,	.5906	.5896
June,	.5898	.5864
July,	.5885	.5808
August,	.5895	.5847
September,	.5882	.5854
October,	.5912	.5840
November,	.5913	.5852
December,	.5910	.5860

The mercury, therefore, maintains almost constantly an elevation of 23 inches.

Another consequence of the great height above the sea, is a low temperature remarkable for the latitude. According to Humboldt, the mean temperature of this region is 17° centigrade (63° Fah.) He says, "In the capital of Mexico, the centigrade thermometer has been known to fall several degrees below the freezing point; but this is a very rare phenomenon and the winters are generally as mild there as in Naples. In the coldest season, the mean heat of the day, is from 13° to 14° (55° to 57° Fah.) The mean temperature of the whole table-land of Mexico is in general 17° (63° Fah.,) which is equal to the temperature of Rome. " But the annexed table, comprising the observations of five years, by Mr. Rio de la Loza, will be more satisfactory. The original measurement is the centigrade, which I have reduced to the Fahrenheit.

	Maximum.	Minimum.
January,	66.02	46.04
February,	70.16	53.24
March,	73.58	55.76
April,	77.36	66.74
May,	77.54	65.84
June,	76.46	62.60
July,	72.86	61.88
August,	73.58	62.06
September,	70.60	60.08
October,	70.34	53.96
November,	69.08	50.90
December,	66.02	48.96

The atmosphere of the city is very little disturbed by winds. What winds there are, generally blow from the north or northeast. From the middle of June, or a little later, to the end of September, is the wet season, when it rains in the latter part of the day, but without much thunder and lightning. During the remainder of the year, there is very little rain, and the heavens are generally cloudless.

CONSTITUTION AND DISEASES OF MEXICANS.

In Stature the Mexicans are very inferior. The Indians are several inches below what is regarded as mediocrity with us. The inclination to degenerate in size, is remarkable in the Mexican horse, jackass, and their product, the mule; and the dog is smaller than the animal of the same species in our own country.

Both the Spanish and Indian Mexican is of a nervous temperament. The body and mind are highly sympathetic with each other. The sensibility of the nervous expansions is keen. The remark which has been made by some of our officers, that Mexicans entertain a great tolerance of pain, is, I am convinced, erroneous. Though the Indian from his taciturnity and reserve, makes an effort to restrain an exhibition of his sufferings, the involuntary expressions which I have witnessed, convince me that his feelings are very acute. Nervous complaints are exceeding common though more especially with the white portion of the community.

The Indian is distinguished for a capacious chest, and a small abdomen.

Among both sexes of the Creoles and among the females of the Indian race, the *adipose* tissue is apt to present a remarkable development.

The Indian exhibits a fine instance of muscular development. The strength he is capable of exerting is superior to that of an European laborer. His great power is particularly manifested in the carrying of burdens. A large chest, small belly and ample muscle, constitute the conformation of men who, without fatigue, can march in a day twice the distance the European is able to accomplish.

The natural intellect of the Creole is certainly good, that of the Indian very contracted. Humboldt thinks, that when the mind of the latter is educated, it manifests a tendency "to subtilize and seize the finest differences in the comparison of objects." He at the same time ascribes to him an almost utter destitution of imagination. Both races possess social feelings susceptible of great refinement. Though their semi-barbarous condition and the unprincipled character of some of their chiefs, have stained their national history with examples of savage ferocity, the real nature of the people is gentle and compassionate. One of the greatest of their faults is *too little independence* of thought and feeling.

The *longevity* of the Spanish portion of the inhabitants is not great. It is quite rare to see a man of very advanced age. The Indians live longer. The annual number of births in the capital, in the mean, for a term of one hundred years, was 5930, and that of deaths, 5050; so that, apart from immigration, the population has had very little tendency to increase.

I now proceed to the consideration of the particular diseases as manifested among the inhabitants of this city.*

Intermittent Fever is by no means a fatal disease. The season of its greatest prevalence is that of April and May. †

Remittent Fever is almost totally unknown.

Typhoid Fever is very common in all seasons, but is most so in April and October. It has the pathognomonic characters which were first noticed by the pathologists of Paris. In the 3d, 9th, and 14th Regiments of Infantry, since their arrival in this city, the fever has prevailed to a very considerable extent.

I arrived here early in December, when I joined the regiment of mounted riflemen. Previously there were a number of cases in the regiment, and the disease had proved fatal to my zealous and indefatigable predecessor, Assistant-Surgeon Suter. But after him, no others in the regiment were affected until the weather became mild.

The cases of typhoid fever which I have seen in the Mexican hospital San Hipolito, and those which have come under my own charge, have been marked by pyrexia; a rose-colored lenticular eruption; tenderness of the bowels, and particularly in the region of the ilio-cœcal valve, with a gurgling sound when pressure is made in the latter region; looseness of the bowels; headache; injected conjunctiva; deafness; more or less stupor; a brown tongue, and a collection of sordes on the gums and teeth; with a belief of the patient that little or nothing was the matter with him. In the most severe cases, there were delirium, subsultus tendinum and involuntary evacuations. Some were accompanied with bronchitic or pleuritic complications. The treatment I have pursued, (and which, in the limited number of cases that have been under my charge, has aways been successful,) has been, to shave the head and apply to it wet cloths, institute a mucilaginous diet, purge the bowels with castor oil once, or more frequently, (if there is much pain in the bowels and the excretions are vitiated,) apply leeches and poultices to the belly, and administer neutral mixture so long as there is preternatural heat and dryness of the skin. If the irritation of the alimentary canal have not been great, I have sometimes given the tartrate of antimony and potassa, with lemonade. When the pleura is affected, I have cupped repeatedly, and endeavored to bring the system under the influence of mercury. I have been studious to cause in the patient's room, a constant renewal of the atmosphere, and, during the day, have sometimes removed him to the open air. The shirt and bed-clothes have been frequently changed.

---

* For my information on this subject, I am most indebted to Dr. Galenzowsky, and Dr. Navarro. The former is one of the most distinguished of the civil practitioners in the city, and of very high professional attainments. The latter, Professor of Surgery in the Military Hospital of Instruction, is a young man of great zeal and talent. In practising with him, at the San Hipolito Hospital, surgical operations on the dead subjects and autopsic inspections, I have derived much benefit from his suggestions.

† It is remarkable that the garrison of Chapultepec were the greatest sufferers from intermittent of all our troops in the valley; at least the fact holds in the two months for which I have had the data necessary to make the comparison. Yet Chapultepec is by far the highest site occupied by our army in the valley. The explanation is, that to the north-east of that place, lies a large marsh, to wit, between it and the city; and that the prevailing winds are from the same direction.

To the *Smallpox* is due the terrible reduction which the Indian population has experienced in some parts of this country since the first entrance of the Spaniards. The disease appears almost exclusively in the form of an epidemic, occurring at very marked intervals. Its ravages were awful in 1763, and still more so in 1779, when in the capital alone it destroyed more than 9000 persons. "A great part of the Mexican youth were cut down that year." In consequence chiefly of the introduction of variolous inoculation, the epidemic of 1797 was less destructive. The *vaccine* inoculation was first introduced in 1804, by Thomas Murphy, who brought the matter from the United States. It was readily submitted to by the inhabitants, who had previously been convinced of the value of an analogous process—inoculation with variolous matter. The introduction of vaccination was matured by a Spanish medical commission, which was despatched by the Government to carry the process into Mexico and other Spanish colonies. Original matter has been obtained from the udders of cows in Atlixco and near Valladolid. Although the smallpox, now that its extension and violence are controlled, by vaccination and rational treatment, is divested of much of its fearfulness, in the *history* of Mexico it stands pre-eminent as the instrument of death. Terrible must have been its ravages to have given occasion to the statement of Motolinia, that in 1520 it carried off one half of the inhabitants.

Yellow Fever does not appear in the capital of the republic, but the *Matlazahuatl*, a disease described as resembling the former, has raged here as an epidemic in times long past. It occurred in the years 1545, 1576, and 1736. Torquemada estimates the mortality caused by it in the first mentioned year at 800,000, and in 1576, at 2,000,000. It is remarkable for not attacking whites and those in whose veins is mingled the blood of the white man.

Diarrhœa and *Dysentery* are, when taken aggregately, charged with a greater mortality than any other disease. Indeed, this mortality amounts to nearly one-fifth of the whole.

That form of *hepatitis* which results in abscess is very common—these abscesses often discharge several pints of pus. It has been found best to make a *very free* external opening to the abscess; nor is it thought necessary to be solicitous about the admission of air, which is not supposed to be injurious. At least, the advantage accruing from maintaining a passage constantly free for the issue of pus, more than counterbalances the injury from the air. In this way, I learn from Dr. Galenzowsky, more than one-half of the cases are cured.

Catarrh and *Bronchitis* are diseases of ordinary occurrence; but *Phthisis Pulmonalis* is very rare. *Vesicular Emphysema* is frequent.

Mexicans have already been stated to be subject to nervous affections. Among these may be specified cephalalgia, epilepsy, neuralgia, paralysis, and chorea.

Calculus is very seldom met with in the city of Mexico. In some other parts of the republic, it is more common.

In respect to *venereal diseases*, they may be stated to be one of the greatest banes of the country. There are few males of middle age in the city of Mexico, who have not been subjects of this disease. Nearly all of the lower class of females, also, have been affected. This is at once an effect and illustration of the immorality of the population. The chancre among the Mexicans is generally of the Hunterian character, and apt to be followed by secondary symptoms. I have frequently heard our medical officers affirm the difficulty of managing venereal affections in this place.

Dropsies are common. *Hemorrhages*, though the fact may seem strange in a country where the external pressure of the atmosphere is slight, are rare.

The inhabitants of this city are much subject to *Pericarditis* and *Endocarditis*, and also to *organic affections* of the *Heart.* Ossification in the vascular system, however, is said not to be unusually frequent.

But one of the most strikingly common diseases in this place, is *Senile Gangrene.* Being present recently at an amputation of the thigh, performed on account of this disease, I extracted the popliteal artery, which clearly demonstrated, in part, the pathology of the affection. In the cardiac portion of the artery is a coagulum of blood; but situated in the peripheral portion, and separated from the coagulum by a narrow section in a state of transition, is a cord of white fibrin. It is to be supposed, that the inner coat of the artery being inflamed caused a coagulum of blood, (as in the analagous case of endocarditis,) which was succeeded by fibrin.

The poor are much affected with *indolent ulcers*, generally situated on the legs. These ulcers are a frequent cause of death.

In walking the streets, one constantly meets persons with *affections of the Eye.* The most common are opacity of the cornea, fibrinous occlusion of the pupil, and inflamed and hypertrophied conjunctiva. Although many cases are exhibited for mendicant purposes, enough others are seen to convince a stranger that the number is extraordinarily large. Inflammations of the cornea and iris, it is well known must be treated promptly and judiciously or the sight will almost certainly be lost by the exudation of coagulable lymph. Now there is probably no more improvident people in the world than the poor of this city. Need we wonder then at the opacities and occlusions? Besides, when we reflect that iritis is frequently produced by syphilis, and that conjunctivitis, as well as inflammation of deeper tissues, is a result of gonorrhœal inoculation and of catarrhal influence, and, moreover, that syphilis, gonorrhœa, and catarrh, are here exceedingly prevalent, we have a most satisfactory explanation.

Considering the fact that close study is not an ordinary phenomenon among Mexicans, *Myopia* is found in the cities of the table-land to an extraordinary extent.

To *diseases of the Skin*, the constitution of the Indian seems rather disinclined. There is, however, one horrible cutaneous affection which is frequently encountered. This is the *Elephantiasis Græca.* There are three forms. The first is characterized by tubercles generally varying from a quarter, to three quarters of an inch broad; disposed to squareness of shape; projecting, red or livid in the beginning, susceptible of change to a bronze hue; sometimes indolent, at other times more sensitive, and accompanied by a swelling of the subcutaneous cellular tissue; preceded by spots of a variable red; beginning usually at the root of the nose, and extending over the head and upper extremities, then affecting the lower, but seldom occupying the trunk. This is called the tuberculous form. The second, called the anæsthetic, is characterized by a want of sensibility in the extremities of the limbs, and by absorption of the bones. I have seen the auricular and annular fingers as completely removed by absorption as by amputation at the metacarpo-phalangeal articulation, and without any semblance of a cicatrix. The third form was first described by Dr. Lucio, physician to the San Lazaro Hospital in this city, for the accommodation of patients of this disease. It consists principally in the production of red and painful discolorations, which commonly terminate in ulceration. The subjects of this form are called lazarinos. Two or more forms sometimes co-exist in the same individual. Dr. Lucio has discovered in the inspection of such as die from this disease, the frequency of certain alterations in the spleen. The first and second forms may be regarded as incurable. The patients, after having been affected many years without any material derangement of general health, usually die with diarrhœa; and in such cases the mesentery is found to contain deposits of tubercular matter. The San Lazaro Hospital was erected in the year 1811. In the year 1844, it had received in all, 82 women and 123 men. Elephantiasis affects only the poor, and particularly such as are exposed to strong heat and humidity. All the patients in this city come from the western side, though I am not aware of any explanation of this fact. The subjects are from 15 to 40 years old.

Looking for the local *causes* of disease, the mind immediately recurs to the large expanse of surface in the valley of Mexico, which is annually flooded by the rains and dried during the dry season. The portion subject to these changes is not less than one-tenth of the whole valley. Here is a grand laboratory for the production of intermittent miasmata. These, however, do not appear to be evolved in the highest amount until the close of the dry season, when the heat is greatest, and the superimposed layer of water has been evaporated.

Another cause of disease is the humidity of the atmosphere during the wet season, when heavy rains occur every day, frequently flooding the streets of the city. The perspiration of the body not being duly evaporated, it becomes necessary that the supply of heat should be diminished to prevent the temperature of the system rising above the normal standard. This supply is founded in the conversion of the carbon of the system into carbonic acid gas, and can be diminished in several different ways. It may be effected by the deposition of carbon in the form of fat, a process, however, which nature is frequently indisposed to adopt. Then the supply of carbon to the system may be curtailed by reducing the amount of food, which is the appropriate mode of overcoming the difficulty. Nature indicates this course by lessening the appetite in such cases. But when the constitution is disinclined to the formation of fat, and when the appetite is artificially stimulated as it is in Mexico by the constant and excessive abuse of alcoholic drinks, red pepper and garlic, then the superabundant carbon remains only to be eliminated by the liver as an element of the bile. The excitement of the liver necessary for this extraordinary labor, disposes it to inflammation. The increased vascularity of the intestines required for a supply of blood by the portal circle, sufficient for the extraordinary secretion of bile, renders the intestinal canal also predisposed to inflammation. This predisposition of the canal is increased by the irritation attending the reception of the unusual amount of bile and of fruits, here almost unlimited in variety, and some of which are not very healthful. Now if a man in the condition just described, with his system overheated and debilitated, go out doors into the rain and wet his feet with the water which has flooded the streets, the surface of the body is too rapidly cooled, and the liver or bowels, already excited, become almost unavoidably the seat of inflammation. We have thus no difficulty in understanding why hepatitis, dysentery and diarrhœa are here so frequent.

The very great difference in the temperature of day and night, and of sunshine and shade, with the thin mode of dressing, is a sufficient cause for the prevalence of catarrhs and bronchitis, as well as other internal inflammations. It is true, that the contiguity of the lakes has a tendency to equalize the temperature of day and night; but there are other causes, which render it extremely unequal. These are, the clearness and stillness of the atmosphere ; the want of trees and other projecting bodies ; and finally, the rareness of the atmosphere, which, in consequence of this rareness, has less power to maintain an equilibrium in the heat of the body, and leaves it more exclusively exposed to the influence of radiated caloric. The latter agency, in connection with the thickness of the walls of houses, renders the change of temperature very great in passing from the sun into the house. Drafts of air, however, have, for the same reason, less potent influences here than in a denser atmosphere.

To the rareness of the atmosphere, also, as may be reasonably imagined, should be attributed the prevalence of vesicular emphysema.

Mexico is an exceedingly filthy city. The poor have no privies, and their excrement is at once deposited in the open street. This outrage, though most practised in the suburbs where the poor reside, is yet much enacted in the central thoroughfares. Some years ago the city authorities directed the Board of Health to report upon the best mode of obviating the nuisance, to which they imputed in part the typhoid fever which is prevalent in Mexico. The Board were in favor of collecting and burning the filth and then removing the residuum beyond the town. But the plan does not appear to have been carried into execution. What makes the filth here more injurious, is, that the stillness of the atmosphere allows the exhalations to become concentrated. From custom, also, the Mexican population permit their bodies to become excessively dirty. The lower order of people are almost universally affected with lice, and fleas are the inmates of the palace as well as the hovel.

The want of occupation of mind and body and the artificial life of the ladies, are causes of the nervous complaints to which they are subject. Another powerful cause, is the custom of smoking, prevalent among females as well as males, and which renders them both, alike nervous. Smoking, however, is now somewhat unfashionable among the ladies of the most elevated class.

Owing to the comparative absence of occupations requiring a constrained posture of the body, and the practice of keeping open the doors and windows, the population are exempt in a great degree from the deposition of tubercular matter in the lungs, which seems to have a dependence on an habitual imperfection in the oxygenation of the blood.

Having before us, as we do, an instance on so grand a scale, of the amalgamation of two totally distinct races. it may be useful to investigate the effects. The product of a white and an Indian is called a mestizo. This class, however, is the result of so much mixture, and remixture, and intermixture, that in most cases it would require a very nice calculation to ascertain the exact value respectively of the original factors. Inasmuch, also, as Humboldt, in the beginning of this century, estimated the Mulatto population at 10,000, or one-tenth of the whole, it is evident that a notable quantity of Negro blood must exist—mingled up and down. No description, therefore, can strictly apply to all the individuals of the class; but a mean may be taken, and latitude given to individual deviations. Since the amount also of negro blood is comparatively small, it may philosophically be overlooked in the comparison instituted between the result of the amalgamation and the elements. In physical constitution, then, the mestizo possesses a clay-colored complexion, very slightly inclined to brown; leanness; slightness of muscular development; extreme pallor of the lips and face; high cheek bones, and hollow cheeks; small under-jaw; low forehead; straight, black hair; and an expression of countenance at once gloomy, sinister, unintellectual and indolent. His common vices of constitution are, anæmia and scrofula. His moral character is correctly illustrated by his countenance. He inherits the deceitfulness and want of good principle of the white, with the mental stupidity of his copper-colored parent. He retains the faults of each; but is more indolent and revengeful than either. His bodily strength is a miserable degeneration from both. The better portion of this class enjoy in society the position of mechanics, servants, and low shop-keepers; but the worst portion are identical with the class known here by the name of leperos, and among the Americans by the contemptuous name of greasers. The lepero, half-clad, wanders idly through the streets, disgusting from his filth, hateful from his crimes, but pitiable from his wretchedness. At night he is ready to perpetrate a secret assassination; by day, to swell a public tumult against the government.

In comparing the results of the amalgamation of two distinct races in Mexico with those of the same thing in the United States, we find the physical and moral consequences much alike. The scrofulous vitiation, in particular, is common to both cases.

In taking leave of this subject, I must acknowledge the great liability there is to error in estimating the moral and intellectual qualities of a race. My statements are meant to be taken with many exceptions. And, after all, while I am convinced of the truth of what I have alleged, the recollection of kind actions on the part of mestizoes which I have witnessed and even received makes the enunciation of the truth painful.

REMARKS ON CERTAIN ARTICLES OF THE MEXICAN MATERIA MEDICA.

The valley of Mexico contains a number of warm springs, among which are those of Peñon de los Bañons, Guadaloupe, and Atotonilco. The two former places are near the capital. The waters of these springs contain carbonic acid, common salt, and alkaline carbonates. Those of Guadaloupe are ferruginous, and also contain cathartic salts. Some of the springs at Atotonilco contain sulphuretted hydrogen.

The *Leeches* of this country are objectionable on several accounts. They are apt to induce stupor or coma.

The *Maguey* (Agave Americana) is applied in this country to a great variety of uses. The juice when fermented, constitutes pulque, the popular drink of the country. This liquor is a powerful diuretic, diaphoretic, stomachic, astringent, tonic and anti-scorbutic. A balsam is prepared from the maguey, which is used here as a vulnerary. The prickly leaves roasted, yield a juice, which, mixed with sugar, forms a syrup valuable in pectoral inflammations. The gum which flows spontaneously from the leaves, is identical with gum-arabic. A great number of observations have been made, which in the estimation of the people of the country, have decided the root to be a singular specific for syphilis.

The root of the *Begonia* (Begonia Balmisiana) has a bitter, revolting taste, and when given in great quantity, is a drastic cathartic; but in moderate doses, purges with mildness. It is an emmenagogue when menstruation is inactive from debility of the uterus; and, like the maguey, is anti-syphilitic; its visible operation, however, being purgative, while that of the maguey is diuretic and diaphoretic. Its dose is about 20 grains.

The seeds of the *Chia* (Salvia Hispanica,) are mucilaginous, and form, with sweetened water, a refreshing beverage, very much used here by people in perfect health. The plant abounds in the tierra caliente, flourishes also very well in more temperate regions.

Epazote, or Epazotl, (Chenopodium Ambrosioides,) is known in Europe by the name of *Tea of Mexico*. It is used here for a variety of culinary preparations, but when the infusion is employed as a medicine, it excites powerfully the skin, kidneys, and uterus. It is also carminative and stomachic. It has been used in chronic catarrhs. It is employed in the United States indiscriminately with chenopod, anthelmint.

The root of the *viola verticillata*, is similar in properties to ipecac.

The *Maravilla*, (Mirabilis Jalapa,) when taken in doses of two drachms, acts as a purgative. Although stated by some authors to be the source of the jalap, it is entirely different from the Convolvulus Jalapa, from which that is derived.

The *Banana,* so well known, is used very commonly as an article of food. It is probable there is no other plant, which, when cultivated, will cause the same amount of land to yield so much alimentary substance. I mention it here more particularly in reference to the injurious—almost poisonous effects produced by the use of brandy after fresh bananas. Much of the cholera and dysentery of our soldiers, has, doubtless, been more or less excited in this manner. The bad effects of this combination, are not generally known among Americans.

Mezquite, (Mimosa Circinalis,) is a species of acacia, as this term was formerly used, and yields a gum like the gum arabic.

Palancapatli, (Solidago Montana,) is reputed to be anti-syphilitic.

The *Pineapple* is used here in nephritic affections and suppression of urine. It is held also to be a powerful anthelmintic, and is used to expel lumbrici.

The seeds of the Pinones de Indias, are a drastic cathartic. The plant resembles the Croton Tiglium.

Tragacanto del pais, (Cactus Juna et Cactus Ophuntia,) is similar to the concretion of the Astragalus Tragacantha.

Yerba del cancer de Mejico, (Gomphrena procumbens.) One kind of this plant grows in the pedrigal by Contreras. It is used with success for the healing of cancerous sores, or at least sores supposed to be cancerous.

Yerba del negro, (Malva angustifolia,) is produced near Huamantla, and is used in rheumatism.

THE MEDICAL PROFESSION IN MEXICO.

The most palmy days of medical science in Mexico were about fourteen years ago, under the patronage of Farias.

There are in the republic four medical colleges, situated respectively in Mexico, Puebla, Valladolid, and Guadalajara. The capital contains now, probably about seventy medical students, and the number does not vary much from this in times of peace. The course of instruction in the medical colleges, embraces a term of five years. The preliminary course required, comprehends among other branches, most of the natural sciences, French and Latin, and within a few years the English language. The character of the profession is rapidly improving ; the older physicians, with the exception of such as have been educated abroad, being very ignorant. No one now is allowed to enter upon the practice of the medical profession without an examination into his qualifications by a board of professional men. Some years ago, a medical monthly periodical was published in this city, but it contained few original articles, and did not survive long. It was the second attempt of the kind.

The fees of medical men are fixed by law. They are higher than in the United States ; but living is also very high, and there are scarcely sufficient inducements for an American physician to settle here. There have, however, been many foreign medical men, who have gained a reputation of the highest character. Some members of the profession in Mexico, are of very great merit.

STATEMENT

Of those that died in the City of Mexico in the Year 1844, according to the Registers of the fourteen Parishes, Hospitals, and Asylums; with a table of the Months, Diseases and Sexes.

	Apoplexy.	Asphyxia.	Aneurism and Diseases of the Heart.	Angina.	Cancer.	Contusions and Wounds.	Cholera Morbus.	Dysentery.	Diarrhœa.	Eclampsia (Inflammatory Convulsions.)	Hectic Diseases (Tabes Mesenterica.)	Epilepsy.	Intemperance.	Scarlatina.	Typhoid Fever.
January,	28	4	3	0	0	23	2	27	38	38	11	0	0	2	35
February,	12	2	10	2	4	18	1	24	45	24	6	0	0	8	39
March,	9	3	3	6	6	12	0	41	58	39	6	0	0	6	44
April,	13	4	6	8	1	13	0	29	34	43	8	0	0	19	53
May,	17	1	9	15	4	12	0	31	37	27	4	2	0	30	49
June,	21	1	4	4	8	10	0	49	43	30	2	1	0	22	38
July,	20	3	8	3	2	13	0	70	61	39	11	1	0	8	34
August,	15	3	8	6	6	12	0	79	76	27	12	1	0	8	22
September,	13	7	4	1	5	10	0	60	67	52	8	0	0	12	36
October,	17	5	5	2	9	17	0	46	55	29	5	3	0	1	50
November,	18	1	2	4	2	15	1	55	52	44	11	0	0	10	32
December,	17	3	3	7	4	26	3	22	50	48	7	1	0	6	29
TOTAL,	200	37	65	58	51	181	7	533	611	440	91	9	0	132	461

	Hepatitis.	Dropsy.	Intermittents.	Gastric Congestion.	Natural Death.	Sudden Death.	Ostitis (Inflammation of the Bones.)	Childbirth and Puerperal Diseases.	Hanged.	Pneumonia and Pleurisy.	Rheumatism and Gout.	Phthisis Pulmonalis.	Simple Ulcers.	Smallpox.	Unclassified Diseases.	Men.	Women.	TOTAL.
January,	6	39	3	18	4	8	2	5	0	62	1	11	13	2	108	259	236	495
February,	11	35	3	11	4	6	0	4	0	75	1	13	5	0	86	228	221	449
March,	9	31	3	19	7	4	0	2	2	67	0	10	7	1	97	234	253	487
April,	6	30	2	17	6	7	0	4	0	52	1	12	8	3	106	258	227	485
May,	13	24	2	14	5	6	1	2	0	51	1	8	14	4	95	242	236	478
June,	7	27	2	21	4	2	0	5	0	30	0	6	1	2	126	230	236	466
July,	9	30	5	18	5	2	0	7	0	55	2	13	6	1	140	267	299	566
August,	6	32	1	29	6	2	0	5	0	54	0	7	12	1	135	271	294	565
September,	11	41	1	19	7	6	0	2	1	38	0	8	12	0	99	269	251	520
October,	3	43	6	11	2	5	0	4	0	44	0	11	8	0	125	258	248	506
November,	6	33	11	13	3	8	0	5	0	88	2	6	19	0	129	288	282	570
December,	10	39	2	17	6	4	0	5	0	60	0	11	3	1	116	263	237	500
TOTAL,	97	404	41	207	59	60	3	50	3	676	8	116	108	15	1362	3067	3020	6087

RESUMÉ *of the Deaths in the City of Mexico, for the Year* 1844.

	Males.	Females.	Total.
In the Parishes, Hospitals and Asylums, - - - - - - - - -	3067	3020	6087
In the Convents from which the Board of Health receive information, - -	5	30	35
Total, - - - - - -	3072	3050	6122

Secretary's Office of the Council of Health of the City of Mexico, Jan. 15, 1845.—ROBREDO.

ART. II.—*On the Anatomical and Physiological History of those Affections which are called Inflammatory.* By J. B. PIGNÉ, Late Curator of the Dupuytren Museum, Ex-Vice-President of the Anatomical Society, Professor of Pathological Anatomy, etc. etc.*

BEFORE forming an opinion of the sketch which we are going to draw, we beg the reader to take the pains to obtain an entire knowledge of it; for some of our propositions taken singly might, at the first glance, appear false; nevertheless, we are persuaded that when considered in connexion they will mutually sustain each other, and convey to his mind the same conviction which animates us.

ANATOMICAL CHARACTERISTICS.

1st. *All the inflamed organs increase in size.* This law has no exceptions. This increase in size, which varies according to the intensity of the disease, is scarcely perceptible in those organs whose texture is thick and close. In general it is much more considerable when the organ affected is at the same time rich in blood-vessels, and where the normal physiological functions are most active; it is remarkable in the testicle, which increases four or five times in size; and the lungs, which receive strong marks from the ribs by which they are compressed; it is particularly evident when an organ being but partially inflamed, the healthy portion may then serve for comparison as in hepatitis, &c., &c.

2d. *The specific weight of an inflamed organ is remarkably increased.* This increase in weight being as much greater as the organ in its normal state was lighter, it happens that the absolute weight of all the inflamed organs is nearly the same, a determined portion of an inflamed lung is nearly as heavy as an equal portion of a liver equally inflamed, &c., in a word under the influence of inflammation, the specific weight increases, but the differences of the absolute weight disappears.

These two phenomena (*increase in size* and *increase in weight*) are not owing solely to the stagnation of the blood; they depend above all upon a particular exudation, the formation of which we shall consider at another time.

3d. *Every inflamed organ becomes more friable.* This friability is a constant characteristic of this affection, without it there can be no inflammation. From the moment the affection commences, the friability commences; it increases with it and disappears completely with it. It proceeds from a diminution of the cohesion of the tissues and is united with an augmentation of their density. It is thus that the lungs, the liver, the muscles, &c., rendered more compact by inflammation, appear hardened, yet, at the same time, they yield under the slightest pressure of the finger; in consequence of this friability, the membranous tissues lose their elasticity and tear readily. This friability is as much greater in proportion to the length of time the inflammation has lasted without losing its intensity; but we must not forget that this friability does not cause a disorganization of the tissues, and they regain at length their structure and their functions: neither must it be confounded with the softening of which we shall treat hereafter.

---

* [For a translation of the following communication from Prof. Pigné, now a resident in this country, and at present in Louisiana, we are indebted to L. A. Sayre, M. D., Prosector to the Professor of Surgery in the College of Physicians and Surgeons of this city.—ED. *New-York Jour. of Med.*]

4th. *The arterial vascularity is augmented*, and this increase is manifested in three very decided ways. 1st. The vessels already existing acquire a greater size, so that those which, in their normal state could not admit the globules of blood, admit them during inflammation. 2d. New vessels are formed which possess all the properties of the normal vessels. 3d. The vessels primarily existing have a great tendency to elongate themselves, they become rectilinearly tortuous, and this elongation permits them to extend and establish communications between the neighboring organs.

As to *venous vascularity*, it seldom undergoes any modification and when it does, it is from diminution. This happens in those cases where the capillary veins are inflamed, for then they are obliterated. From this it is evident there must be an obstruction of blood, since the arteries which are more numerous and much larger, bring more blood, whilst the veins, never increasing and much smaller, cannot carry back to the heart the whole quantity of arterial blood which an inflamed organ receives.

5th. *In the inflamed organs the normal color is always modified.* The organ ordinarily takes a rose tint, a cherry color. The different shades with which we meet, are all those shades which separate the most delicate rose color from the deepest red or the darkest blue; nevertheless in some special organs we meet with some special colorings; it is thus in iritis—it is a color which is not fixed, but it is never red. One would say it had been formed of several colors mixed together, or badly washed out with a sponge. So in all the transparent organs in the normal state, the color is white; much more opaque when the inflammation has continued a long time with a certain degree of intensity; this we see in inflammations of serous tissues, synovial membranes, transparent cornea, &c., &c.

6th. *The composition of the blood alters*, and this alteration falls principally upon the fibrine, which is increased in a greater or less quantity according to the importance of the organs affected, the age of the subject and the intensity of the inflammation. The blood has also a great tendency to separate into two parts, one liquid the other solid. It is to the re-union of these two characters that the formation of clotted blood is owing, and the buffy coat.

7th. *Every inflamed organ becomes filled with a greater or less quantity of liquids.* These, transparent at first, soon become opaque, if the inflammation continues with a certain degree of intensity. These liquids are those which serve, according to the case, for the production of pus, and the formation of pseudo-membranous tissues, granulations, &c., &c.

This exudation is the result of the stagnation of the blood, owing to the augmentation of the arterial system ; we know, therefore, that whenever there is any obstacle to the return of the blood, its serous particles are transfused amongst the vessels and fill the surrounding tissues.

REFLECTIONS.

Such are the anatomical characteristics of inflammation. It is not possible for inflammation to exist without their appearance, and the moment they exist simultaneously there is inflammation. *A number of alterations* might cause the solitary appearance of any one of them, but none have the property of producing them simultaneously except inflammation.

Amongst these characteristics, one alone begins with inflammation, increases with it, diminishes when it diminishes, and disappears when it disappears. This is *friability*. The others, though commencing with inflammation, and generally disappearing completely when it arrives at its end, may nevertheless continue a long time after; such are *weight*, *vascularity*, *coloration*, and exudation. But if the inflammation advance rapidly, if it arrive in some hours at its apogee, and bring death quickly ; as for example, in acute peritonitis, then all the anatomical phenomena disappear and at the autopsy, no trace can be discovered : in other words, the existence of anatomical characteristics is subordinate to the duration of the inflammation ; and the conclusion drawn from this observation is, that a true inflammation should be treated vigorously and checked promptly, if you would prevent disorganization in a permanent manner.

One of these phenomena belongs especially to the first period ; that is, the *modification of the blood*, of which I have spoken ; it is but momentary, and disappears sometimes at the end of a few hours, but ordinarily at the end of three or four days. At the commencement of the disease, it is altogether local, and is not met with, but in the blood of the part affected. It is only later, often at the end of two or three days, that it becomes general, and may be perceived in the blood from the vein. This increase of *fibrine*, presents one peculiarity which I have remarked from the beginning, and which I can prove by several chemists ; which is, that *we do not meet with it except in venous blood*, whilst in *arterial blood* we find *less* than in the normal state.

One last observation, regarding these anatomical characteristics, in relation to the *coloring* of the inflamed parts. It has been said that this coloring was paler in the organs, which are rich in lymphatic vessels, redder when the arterial capillary vessels prevail, and violet where the venous capillary system is the most abundant. This is manifestly an error ; for in the same organ, upon the same individual, we sometimes meet all these shades united, from the rose to the deepest blue. It is evident, on the contrary, that the modifications in the color, depend upon the intensity and duration of the obstruction of blood : in truth, the result of this duration is, that the blood loses its liquids which filter into the neighboring tissues, the coloring matter remains alone in the vessels, and it experiences a modification analogous to that which the arterial blood undergoes normally in the tissues, that is to say, it becomes venous—it is owing to these changes that the coloring becomes more or less dark.

PHYSIOLOGICAL CHARACTERISTICS.

1st. *The sensibility common to a diseased organ is augmented* to that extent, that the degree of irritation to which every organ is subjected in its normal state, cannot be borne. It is thus that the presence of light is very painful in ophthalmia; that of sound in otitis. Of aliments and beverages in diseases of the œsophagus, of urine in those of the urethra, &c. &c. This sensibility requires an *external influence* for its manifestation, from which circumstance it is never spontaneous—it is *the same* as the *normal sensibility,* only it is exaggerated; it does not exist during inflammation in those organs which are insensible in their normal state; it is also much greater when the affected organs contain many nerves. Compression never relieves it, sometimes, even, increases it. It is produced, it is true, with inflammation, but it often remains a long time after that has terminated. Generally, this augmentation of insensibility is altogether local, but sometimes it becomes general, and then takes the name of *irritability.* In these cases, the sick are very susceptible to the influence of external agents; all their senses acquire an exceeding delicacy. Hearing is developed in such a manner, as to enable them to hear very low sounds, even at a great distance; their sight is sometimes prodigiously acute, and their smell is affected by even very slight odors, &c. This irritability occurs principally in very nervous persons, where the inflammation has lasted a long time, with a certain degree of intensity. It is not rare to see sick persons sink from too great a degree of sensibility, as we see others die from the loss of too much blood.

2d. *Pain is often the first phenomenon which is manifested.* Often, too, it is the only one which is observable in inflammations of those organs which are deeply seated. It is fixed and permanent, very variable in its character: in general, it is dull in the parenchyma, deep in the serous, slight in the mucous, shooting and pulsating in the cellular tissue, grinding in the bony system, &c. It commences with inflammation, increases with it, diminishes with it, and disappears with it; it may, if we may so speak, serve as a thermometer for inflammation. It is developed spontaneously, and has no need of any external agent for its manifestation; it is much more severe, when the inflammation is more intense; it is also more severe, when the inflamed organs contain *fewer* nerves. Compression almost always diminishes it, and often causes it to disappear completely; it is always *local,* and confined to the part inflamed.

From what I have just said, it can be seen that *pain* and *increase of sensibility* are two different phenomena. I regard one as being simply an exaggeration of a physiological phenomenon, and the other as, if we may so say, *a new function*, a new phenomenon, a stranger to the normal organization, and *brought about by inflammation.* It is not, however, a special peculiarity of inflammation, because there are a number of organic maladies, which have also the property of causing pain. I would only remark that in the same organ, pain varies according to the nature of the disease which affects it; in the bony system, for instance, it is permanent and grinding, under the influence of inflammation; on the contrary, it is in the same tissue, shooting and remittent under the influence of cancer; dull and continuing only during the after part of the day and night, in syphilis, &c., &c.: whilst, if pain were the result of the same act, that is to say, of the compression of the nervous system, for example, it would be always the same while it remained in the same organ. I will add, relative to inflammation, that the increase of sensibility from any cause whatever, may produce inflammation; whilst inflammatory pain is always caused by inflammation.

3d. *Heat is increased in every inflamed organ.*—Although after the experiments of Hunter, it appeared that the temperature did not seem to rise above that of the blood in the heart, it nevertheless increases from 1½° to 2° *Reaumur*, in the parts situated far from the centre of circulation. This heat, which increases with inflammation, is almost always felt by the patient, perceptible to the hand of the physician and even to the thermometer; it is not always as great as it appears to the patient; and also it varies according to the nature and intensity of the inflammation, and according to the structure of the affected organ.

This augmentation of heat is entirely *local*, during the first period of inflammation, but at the end of two or three days, it extends over the whole economy, and it is not rare to see the general temperature of the body, which in the normal state was from 31° to 34° ***Reuamur's***, rise to 37°, and even to 44°. It rarely lasts in a general manner more than 12 to15 hours, without being accompanied with very great weakness.

4th. *Pulsations in an inflamed organ are quicker and stronger.*—The patient feels it, the finger of the physician perceives it, his eye sees it in some cases. The same phenomena are observed in the great arterial trunks which conduct the blood to the organ affected. It is thus in meningitis, the pulsation of the carotid artery is stronger than that of the radial, in the phlegmon of an inferior extremity the pulsation of the crural of the side affected is stronger than that of the crural of the healthy side, &c. Moreover, these pulsations *appear* more frequent. We must not be deceived by this phenomena; the pulsations are not more *frequent* in the inflamed organ than in the rest of the body, as some pathologists have written. These pulsations are the result of the contraction of the heart, and to admit that they are more frequent in one part of the body than in another would be to admit that the heart beats more frequently for one part than for another, which would be absurd. But the thickening of the blood in the vessels of the inflamed part, diminishes the duration of the passage of the blood in this region, and the blood having struck against the obstacle ebbs, which prolongs its undulations; again this column of blood having received an impulse sufficient to send it to the capillary vessels, meets with an obstacle owing to the stagnation of the blood, exhausts its shock against its sides, which gives to each pulsation greater *strength.*

It is, therefore, true to say, that the pulsations of the arteries in the inflamed part are more *energetic* and more *prolonged*, but it is false to say, that they are more frequent than in other parts of the body.

5th. *The normal secretions of the inflamed organ are considerably modified during the disease.* They are generally *diminished* and sometimes *destroyed* in the first period, and remarkably increased in the second. It is thus that we observe a species of dryness during the first period of pleurisy, pericarditis, peritonitis, &c., and to this dryness succeeds an abundant secretion of serosity; it is thus in inflammation of the skin, the salivary glands, the intestines, the kidneys, the liver, &c., we find at first a remarkable diminution in the secretion of perspiration, of saliva, of intestinal mucous, of urine, of bile, &c., and soon after an abundant secretion of these same liquids takes place. There is yet more, which is, when a morbid secretion exists, exacerbation which occurs in the progress of the inflammation, is marked by a stoppage in the secretion, which nevertheless recommences directly; it is thus if an ulcer inflames, then the suppuration it furnished is at first suppressed; then it returns and most frequently changes its nature. We may generalize this idea and say, that in all organs affected with inflammation, the productive function diminishes at first, but soon after becomes more active. The brain itself, the organ producing thought, does not escape this law, for in the first period of its inflammation we see it work lazily; but soon so prodigious an activity returns to it, that it might seem a disorder; but let no one be deceived, the disorder is only apparent. The cause is, that the ideas succeed each other with such abundance and rapidity that speech is too slow to suffice for their manifestation; thus the patient speaks constantly, commences many sentences, often finishes none; that which appears to the listener an incoherence of ideas, is an incoherence which exists in the tongue, but does not exist in the brain.

The *modification* in *quantity*, which one meets with in these two periods of inflammation, sometimes bears also upon the *quality* of the secretions, but only where the inflammation has continued a *long time.* It is thus in parotitis, the saliva has a metallic taste quite peculiar; in coryza, the nasal mucous becomes irritating; in nephritis, the urine becomes alkaline, albuminous, &c., in enteritis, the mucus is serous, sometimes acrid, sometimes salt, &c. It is not even rare to see this exhalation carried to that point, that almost pure blood, is perspired with the products of the secretion. This exaggeration which almost always constitutes a happy crisis, when it is confined to a small surface, as in coryza, iritis, &c. &c., is often fatal when it is extended over a large surface, as in enteritis.

6th. *Absorption is considerably augmented in the first period of inflammation, and considerably diminished in the second.*—It is even completely suppressed when the affection is carried to a very great degree.

REFLECTIONS.

If we compare the modifications which take place in secretion with those which are seen in absorption, we see that in the first period there is a diminution in the secretion, and an augmentation in the absorption ; whilst in the second period, there is an augmentation in the secretion, and a diminution in the absorption. We also find in the first period a dryness in the inflamed organs ; it is to this dryness that the itching is owing which precedes coryza ; the noise, the friction at the commencement of pericarditis, pleurisy, peritonitis ; constipation (owing to the absence of mucus,) which precedes diarrhœa, enteritis, &c. It is also owing to the characteristics which we find in the second period that we meet with accumulations of liquids in the serous and abundant flowings in the mucous, &c. &c.

(I would here remark that, the observation of this law is of great importance in therapeutics. The medicines administered by the endermic method, can only be absorbed in the first period of the inflammation, and never in the second. Put *morphine, strychnine, &c.* upon a blister, the first day, the effect will be very *active*, very *little* the second day, and scarcely any the third. If you apply an ointment of arsenic to a chronic ulcer, the first day it will have a caustic effect, and the next day the phenomenon of intoxication. The first day, the caustic caused an inflammation, and the second day, this inflammation being in its first period, favored the absorption. It is undoubted that the endermic method may cause good results, but it is only on the condition of regarding these phenomena which we have indicated.) Finally, I would observe, that in certain cases, inflammation progresses so *rapidly*, that the first period passes almost imperceptibly, and the period of secretion appears to have existed alone, without being preceded by the period of dryness. These facts are sufficiently rare.

7th. *The contractibility of the tissues diminishes or ceases, sometimes completely.* Thus an inflamed muscle ceases to contract ; the movement of the intestines is stopped ; that of the heart lessened. If an inflammation attacks the uterus of a woman who has been delivered, the uterus will return but feebly to its place ; in cystitis, the bladder reacts very little, and sometimes not at all, upon the liquid that it contains, and nevertheless the organs are found in the same state as when at the highest degree of their normal physiological functional power ; the iris is tightened, the muscles are drawn back, the bladder is in a permanant state of contraction, the sphincters are violently convulsed, the diaphragm is seized with numerous and short motions. It is owing to this law that the moving organs, which, during inflammation, are heavier than in their normal state, are governed by the general law of weight ; the inflamed stomach approaches the anterior and superior side of the abdomen, as during the elaboration of food ; the uterus rises in the pelvis as during gestation ; the testicle rises towards the inguinal canal as during emission.

8th. *Inflammation has the property of awakening certain sympathies between organs whose difference of structure, of position and function, would seem to keep constant strangers to one another.* If we examine facts, we shall find these sympathies of three orders.

1. *The sympathies,* which I shall designate as *direct,* which do not aggravate the condition of the patient. This is a disease which joins

itself to another, but as soon as the sympathetic affection is developed, it progresses with the other; they exercise no influence over one another; such is the action of the skin in certain cases, on the digestive tube; one eye over another, &c. &c.

2. *Inverse sympathies*, which have the properties of diminishing the first inflammation or causing it to cease, and substituting themselves for it; such is the action of erysipelas upon the mucous membrane of the pleura, and the lungs upon the skin; of gastritis upon the meninges.

3. *Constant sympathies*, which are true complications of the disease, and which aggravate the patient's complaint considerably. This class of sympathies have this remarkable property of always affecting the same organs in the same diseases, so that the physician may foresee their approach. It is thus that meningitis determines gastritis; that we see orchitis appear during parotitis; catarrhal affections during the measles; gastric affections during smallpox; bilious affections during scarlatina; diseases of the urinary passages during nephritis, &c. It often happens that these constant sympathies are more intense than the original disease; and these affections which accompany them hide the real disease completely; which may deceive the physician.

9th. *It is incontestable, that during the course of inflammation, and above all during the first period, a much greater quantity of electricity is developed in the inflamed organ.* It is to this, undoubtedly, that we may attribute that itching—that species of irritation which precedes the development of erysipelas. Schönlein also attributes to it the production of that serosity which is diffused in the tissues, and that which forms sudaminæ.

Experience has not yet determined whether this electricity is positive or negative; perhaps (and I am tempted to think so,) it is both, according to the case, and perhaps also, this variation of electricity may produce some modification in the nature of the inflammation. (This is to be examined.)

10th. *Inflammation developes in the organs a generating power (vis germina,) which is sometimes enormous.* It is to this power that the augmentation in the size of the vessels is owing; the formation of new vessels; the secretion, the deposition and organization in the organs of pseudo-membranous tissues; the development of new products; the reproductive healing in the loss of substances, &c. It is this power that surgery employs, and without which, it would be impossible to obtain the cicatrizing of any wound. Such are the *physiological phenomena of inflammation.*

Reflections.

In all inflammations we find phenomena of the *nerves* and phenomena of the *blood*, that is to say, phenomena which belong to the two systems in which are found placed organic nutrition and the maintenance of the integrity of the physiological functions. If we examine these facts impartially, we shall see, that when these two systems are simultaneously excited, with a predominance of the element of blood, we find a much greater vegetability in the affected organ, at endency for new productions. When the sanguineous system is alone remarkably excited, and the nervous system remains very nearly in the limits of its nervous excitement, the strength of the inflammation acts without causing any accidental production. When the two systems are simultaneously excited, with a predominance of the nervous element, we meet with bad erysipelatous and rheumatic affections. Also, if there is an excitation in the sanguineous element, with a depression of the nervous element, we meet with typhoid, putrid, puerperal affections, &c. &c.

ART. III.—*On Milk Fever, and Abscess of the Mamma.* By J. H. SHEARMAN, M.D. (Continued from page 174.)

I HAVE already considered some of the causes of milk fever. I will now proceed to note some further causes of it and to offer such suggestions as my own experience of the disorder and knowledge of its remedial treatment may enable me.

The great exciting cause of all fever, is, what is commonly but forcibly called "catching cold." The philosophical phrase of course would be, "abstraction of caloric." The instincts of our animal nature and the experience of our senses are unerring indications and sources of knowledge. No one was ever left so ignorant, by the condition of his nature, as not to know that want of proper food and requisite warmth were inevitable causes of fever.

However, a man may be so highly civilized and educated as to pass by such common-place knowledge, and look for information, as the philosopher looked for his spectacles, everywhere except just before his eyes. A chill will, in a majority of cases, be found to be the immediate cause of fever. It is the most common cause of milk fever.

When a room is over-heated, the body over-covered, and the skin has little circulation of blood, from lack of contact with air, and application of water, chilliness is as common as, nay more common than, when the body is exposed to cold and damp. A delicate woman would bear, without injury, entire exposure of the body to frost and snow, for the same length of time, as would suffice to give her cold and fever merely by the door being left open, when in the unnatural condition above described.

Supposing, then, that a woman in the condition of lactating, be chilled, and fever set in, what should be done? As she has been disordered by losing the heat of her body, she can be restored to order only by giving back that which has been taken away.

In any manner and in every manner in which she can receive heat agreeably, she ought to have it, but her own sensations should be the guide of our judgments. If she can comfortably take warm drinks, let her, and if agreeable to her taste and inclination, let warm spicy substances be added to them. One question of importance inevitably forces its way here. Ought alcohol in any way to be administered? The decision which I invariably give, is this: If the patient be so habituated to the use of alcohol as to be incapable of enjoying life without it, let her have some kind of alcoholic drink;

if she be not in such a melancholy and miserable condition, keep alcoholic drinks from her, as we would any other poison.

A warm room, with fresh, clean, dry *cotton* under-clothing, and a sufficiency of comfortable over-covering, not heavy, so as to admit of air about the skin and vapor to pass off, will in general be sufficient to restore the heat which has been abstracted. I mark the word *cotton*, for what appears to me to be good reasons. *Cotton* garments are worn as loosely as *linen* ones. If *woollen* garments were worn as loosely, I should have no objection to them: but as long as they are worn tightly fitting the body, they exclude the air from the skin and keep in the perspiration, and thus are one of the great causes of chilliness, fever and rheumatism.

If the skin from want of cleanliness and the action of the air, be in a state of clamminess and imperfect circulation; nothing will tend to restore warmth and health so soon, as washing the whole body with moderately cold water and soap, in a warm room. I have often found this preferable to a warm bath. The bath very commonly diminishes respiration—the only source of animal heat; the washing invariably increases it.

If I must say anything about "materia medica," I would simply give a cup or two of black or ginger tea, comfortably sweetened, or if I must have something out of a drug store, a few pills or a bolus of camphor and capsicum. If the chill be of long duration, a foot-bath, while sitting enveloped in a blanket, will be of great use.

Suppose that we are successful in restoring the temperature of the body, the whole of our work as physicians is accomplished. If we fail; rigors, shivering, head-ache, back-ache, and nausea occur, and preternatural heat and thirst follow. What shall we do now? The blood is in a disordered state, the elements are neither in their proper quantity nor quality. Carbon and hydrogen are consumed by the respiration of the lungs, faster than the oxygen, nitrogen, sulphur, phosphorus, and alkalies, are used by the excretory organs. Hence there is an inequality as well as unfitness of the constituents of the blood.

Shall we augment this inequality and unfitness of the blood, by adding to it, mercury, antimony, nitre, ammonia, ipecacuanha, and so on? or shall we consult nature, by attending to the sensations and appetites of the patient? If we do the latter, we shall be asked for cold water, some acidulous vegetable, and cool air. What harm is there in these things? Sponging the body with cold water will be agreeable—who can give a reason against it? Will not roast apples, oranges, and currant jelly, be as serviceable to the stomach and intestines, as castor oil or Epsom salts? Will not lemonade do as well as acetate of ammonia? Oh for the days when a physician need not be a nuisance, in order to get his living! Do not some of us long for a medical Utopia?

If it be contended that unless we give some medicine, we shall be thought ignorant or inattentive, I reply, take down your sign and throw your capital, body and soul, into some well paying charlatan establishment—Brandreth's or Townsend's—or even put your trust in the Graeffenberg Company. If you donot like to endure the penalties of a philosopher, try to enjoy the plunder of a quack.

Treat your patient naturally, rationally, and you may hope to have her restored in three or four days, and secure her gratitude, and perchance the payment of your account. Bleed her, physic her, mercurialize her, and treat her unnaturally, and you may make a three week's case for yourself, and secure her dread of all doctors and physic, and find her both unable and unwilling to pay you, but ready enough to curse you and all other of her afflictions.

Let us now consider the condition and treatment of the breasts. Of course they are enlarged and hot during the fever. What is to be done? Let them have plenty of air; for the greater the circulation of the air around them, the faster will the excess of heat be removed, and the sooner will they be likely to be restored to the condition of health. They should be perfectly loose—free from the slightest pressure which might interrupt the circulation. The bandages which are inflicted upon women in their parturient condition, very frequently cause great mischief to the breasts, by preventing the free circulation of the blood. This, of itself, has, in more than one instance, to my knowledge, caused tumefaction of the breasts, and fever. A nurse, an old woman of any description, female or male, will not perceive this, because she—*it* I should say—has been brought up to believe that bandaging tightly is requisite to the health, and what with some is of more consequence, the shape of the lying-in woman.

With such, all reasoning is vain. We are not to expect such persons to reason; it is for the medical philosopher to do that. Let us use a familiar illustration. Tie a ligature round one of your fingers, and you will soon feel the effects of it, in the swelling, heat and pain of that part of the finger which is beyond the ligature. The same effect, in a modified degree, is produced by the abdominal bandage in the breasts. If no more of mischief, than the interruption of the epidermal circulation, is produced, that is enough to cause fever and swelled breasts.

Another illustration will assist us still more. A tight boot or shoe, causes sighing, faintness, qualmishness, head-ache, bitterness of the taste, and fever, before the pain of the foot makes us pay attention to the cause of our ailments. This, I unhappily know too well—not because I am fond of tight boots or shoes, but simply because I have been foolish enough in my time to believe the interested judgment of the bootmaker, instead of trusting to my own sensations and instincts.

Happily for me, at last I have come to the conclusion, never to believe any one, contrary to the impressions of my senses—neither bootmakers, tailors, doctors, philosophers, nor theologians. If I am cold, I believe in warming myself, in spite of all the world. If I am hot, I believe in cooling myself until I am comfortable. If I am hungry and have some special direction of my appetite, I satisfy it with the required food, if I can get it. If I suffer pain, and find out the cause, I endeavor to remove it; and when I am queer and feverish, I trace it to something which I have done or omitted to do, and put that something right, before I expect to be any better. So I philosophize with myself—so do I philosophize with my patients; and give them the same advantages which I obtain for myself.

Supposing the breasts are tumid and painful, and threaten to obstruct the flow of the milk, and cause abscess; we must proceed in exactly the same manner as we would in a case of approaching inflammation of the mamma; cool the part down as quickly as possible, and if iced water and ice can be obtained, that is the most effectual.

A young married woman who had been confined in the country with her relatives, returned to town, with her breasts tumid and painful, and sent for me. She had had no sleep for two nights, and feeling nearly distracted, hoped I could do something to relieve her instantly. I applied ice to her breasts, and she experienced immediate relief. In about two hours, she fell asleep; the fever subsided; she could bear the breasts to be handled, and the milk drawn, and she had a speedy recovery.

It is true, that although every thing went well with her, it was not so with me. A married woman, who acted as nurse, was terribly outraged at my using ice, when she had been using fomentations and poultices. She predicted the murder of the patient; but it did not happen under my administration.

In another case, that of a colored woman whom I attended, who thought that she would tumble asunder if she was not bandaged up tight to her very breasts, they became frightfully tumid, and threatened abscess and fever. In an hour or two, the whole of the tumefaction subsided by the application of ice, and the milk ran again nicely.

Here, I had more of ignorance to contend with than in the former case. Another physician was called in, as soon as the symptoms were subsiding, and he happened to come—so it seems—just in time to save the valuable woman's life. She had lost the use of her limbs, from applying the ice—so she informed me, as she sat rocking herself in her chair, throwing her arms and legs about most violently—and should have been dead, but for something which the doctor gave her.

I was thinking whether she had not better have lost the use of her tongue, than employ it so ungratefully and falsely, when I was roused from my philosophic revery, by being informed that the other doctor, actually held up his hands, on hearing of my applying ice to the breasts. There was no reply left for me, but that of unconsciously holding up my own hands, in distressful consideration of the "learned ignorance" of my profession, and I ended the discussion of the question, by retiring to write my article.

The learned and ingenious Dr. Edward Johnson, of London, gives a very interesting detail of the case of his own wife, whose breasts were so inflamed and hard, that no milk had escaped them for two days: but on the application of snow to them, in less than two hours, spirted out their milk freely, to her perfect relief.

I have been in the habit of applying ice for such cases for many years, ever since my own life and that of my child were saved by the use of ice in inflammation of the brain. I employ ice in these cases, on the same principle that I employ it in phymosis and certain cases of hernia, to reduce the volume and diminish the sensibility of the parts.

The quantity of heat in a substance determines its volume. If the substance of the breast be very turgid it will press upon the ducts of the lacteal glands, and prevent them from opening and pouring out their milk. Reduce the heat, the substance will be diminished and the pressure removed.

If the temperature of the body be low, the sensibility will be very little. As we increase the temperature, the sensibility increases, up to the point of torture and destruction. When the breast is tumefied, its sensibility is much increased; and the application of ice is always attended with relief. As soon as the distressing symptoms subside, the ice should be removed.

It is scarcely requisite for me to say much respecting the drawing of the breasts. As long as the formation and secretion of milk go on, it ought to be drawn off by the child or by some substitute for it, as often as the feeling of uneasiness occurs. In this respect, the breasts should be treated like the bladder. The next best substitute for the child to draw the breasts, is a grown person. Then, in the absence of both these, we may resort to breast pumps. In these, the principle of construction, ought to be that of the mouth of the child. The pressure, as nearly as possible round the nipple; the power, merely that of forming a vacuum, in order that the milk may be compelled to flow. Let but the principle be kept up, and the instrument may be made, " after what flourish your nature will."

Now, supposing that we are called in too late to prevent suppuration—what shall be our course? There is a very important point for us to consider. Suppuration has commenced, and we cannot hinder it; but is it a good or an evil? If it be a good, the more of it the better. If it be an evil, the less of it the better. What caused this suppuration? The disorganization of the vessels and tissues, through which the blood had to pass, but was no longer able; so it oozed and drained through and underwent decomposition.

This disorganization was produced by the obstructed state of the circulation, from pressure on the vessels; and an abnormal condition of the blood. These two conditions, were caused by the breasts being kept too hot, and shut out from the benign operation of the air; and from improper food and wrong treatment of the whole body. Shall we continue the treatment which gave rise to the original condition, that brought on the final destruction?

Again we appeal to the sensations and appetites. If warmth be most agreeable to the parts, let them be kept comfortably warm. If coolness be sought for by the feelings, let the breasts be cooled, even with ice if it be requisite. As long as heat is wanted by the sensations, the destructive process is advancing, and the living parts have not heat enough to sustain life well. As long as cold is wanted, there is an excess of heat educed by the inflamed condition—which is injurious to the living parts, and the sooner it is abstracted the better. Our sensations, are the indicators of our natural organic thermometer.

I must philosophize a little more on this point. Organic life in animals, depends upon two processes; the constant deposition of new particles, whose caloric of composition is used in maintaining warmth, feeling and motion, and the constant removal of old particles, whose caloric of composition is expended, and therefore they are dead.

The process of deposition, or life, necessarily requires the blood which is to be deposited to be of a higher temperature than the solids with which it is deposited. If the temperature of the solids is too high, deposition cannot take place, and consequently life is at once suspended. Here cold applications are requisite. If the temperature of the solids is too low, contractility and mobility are lost, and circulation and distribution of blood and heat cannot be continued, and therefore life is suspended. Here, heat is required.

The sensations, are the indicators of both states. Our practice may be confidently regulated by the sensations. When cold is most agreeable, we may safely apply it, being assured that life is suspended from the solids being too hot. When warmth is most agreeable, we may safely apply that, knowing that life is suspended from the solids being too cold.

There is but one other consideration in this stage of our attention. Shall we use any other application than heat or cold ? As water is an ever-present requisite of our organization, we may employ it whenever it is agreeable, and leave it off when not wished for. But is it requisite to employ any other substances ? Of course, nurses and old women, of both sexes and ages, have their infallible remedies, time-honored and case-proved. It matters not that they are different or contrary. When once we leave the path of observation and induction, there is no error nor grossness too palpable or disgusting for us to receive and sanction. From herb-poultices down to cow-dung; including in the sweepings of ignorance and superstition, every sort of oil, grease, poultice and plaster,—all and each are specifics. Not one of them but what, in some case, a cure was effected by its application,—that is, some one survived its operation. That is, verily, much in its favor. My own opinion—I hope I feel the importance of expressing it with modesty in the midst of such an august assemblage of advisers—is, that the less we do, the better. If we wish to keep the breasts warm, some dry cotton-wool, or soft flannel, will be the best application. We may, now and then, employ a fomentation of either mere hot water, or an infusion of hops, chamomiles. or poppy-heads; and we may use a poultice. But, the efficiency of all these, is their heat. For producing cold, water or ice is all that is requisite. I am by no means unaware, that the suspicion of ignorance will attach to me for thus expressing myself. It is possible, however, that I might dilate upon the operation of the substances recommended and employed, in such a manner, as to show that it was not exactly ignorance, but rather an enlarged knowledge of their properties, that led me to my conclusions. However, I will merely state now, that the sole value of any of them consists in augmenting or diminishing the quantity of caloric in the part to which it is applied. As I regard the occurrence of an abscess any where as a misfortune, the less of the evil the better, say I. Whatever tends to diminish the size of the abscess and the quantity of the matter is most desirable. Be guided by the sensations. Whatever produces most comfort is most beneficial.

I am not intending to overlook the question of food. "What shall we eat? what shall we drink?" are questions of great importance. I never knew any persons laboring under fever wish for much food of any sort; but they have invariably some particular like or dislike. And I have always found this peculiarity dependent upon some physical requirement of the body. Some desire things salt; others, things saccharine; others, things acidulous. Provided the things desired be food, that is, be substance which is convertible into, and needed by, the substance of the body, there can be no harm in the use of them; and there may be much harm in their forbiddance. I write from large and careful inductions.

Some desire gruel; others cannot taste it. Some wish for tea; some long for broth; some seek for lemonade, soda-water, or rather carbonic acidulated water; some will take fruits; some, meat; some, merely vegetables; some, only water; and some, nothing. I accommodate them all. Of liquor, I have already spoken, and have nothing more to say. If any one is disposed to reply, "why, you merely follow nature!" I rise from my seat, make a low bow,—almost an eastern salaam,—and say, "Sir, you do me too much honor; you place me with the true philosophers and physicians of all ages and countries, from—ay, and before—the time of Hippocrates, down through the noble ranks of Galens, Celsuses, Boerhaaves, Bacons, Sydenhams, Shakspeares, Radcliffes, and Metcalfes."

If any one ask, what Shakspeare is quoted for as a medical or philosophical authority, I reply, that it is easier to construct a true medicinal practice from his works, than from those of any other man. He is the greatest natural physiologist and pathologist that the world ever produced. The man that can read Macbeth and Hamlet, and not discover this, has no tact nor taste for the sciences of physiology and pathology.

If I am asked who Metcalfe is, I reply, get a copy of his "Caloric," and read it; that will tell you. If the work be scarce, as there is only an English edition of it,—I refer you to two reviews of it, in former numbers of this Journal. I will just add, that, guided by the philosophy of Shakspeare, he has threaded his way through the mazes of every obscurity in physical philosophy, and arrived at the hidden temple of truth. Any one who reads and comprehends his work, is in possession of the key of nature.

There remains still for our consideration, the treatment of the abscess, and the healing of the wound. The great secret of healing an abscess, is, meddle with it as little as possible. Cleanliness, rest, and comfort, are worth more than any ointment or application in the world. A nice, soft, clean sponge, adapted to the shape of the wound, is the very best poultice. Lint, cotton-wool, and oil skin, or silk, are next.

If poultices must be had, they ought to be soft, warm and light, and changed frequently. All grease is injurious; and all mineral applications so much poison. If you wish to destroy a fungous part, do so with nitrate of silver. But do not imagine that wounds are healed by poisons. There is but one thing which heals a wound—*good blood.* You cannot make it; mind that you do not mar it. The stomach, intestines, and lungs, are the laboratories where blood is made—not the doctor's shop. Meat, gravies, vegetables, fruits, and water, are the materials for making it—not drugs. Obey the injunction of Diogenes:—don't hinder the sunshine; stand out of the way, and let nature alone to do her work. It is really marvellous, how little we know; yet how much we do. In proportion as we know more, we shall do less—at all events, less mischief.

Why do so many accidents happen to steam-engines? The men who undertake to direct them, have not enough of philosophy and good sense for their business. The reason why there are so many bodies out of order, is, that those who have the management of them are so incompetent to the task. If it be felt and said, that I assume to myself the dictatorship of medical philosophy, I answer, so does every one who writes upon a medical subject.

If I were permitted to write my own medical history, I should have a hundred blunders to put down, for one discovery of rectitude. And the most painful part of my experience is, that my blunders always paid me better than my rectitudes. I have been well cursed and defrauded for every discovery and delightful cure which I have achieved "*novo modo;*"—while I have been handsomely paid and thanked, for helping, with some of my learned brethren, to medicate to the grave "*secundem artem*" some who have put their trust in our philosophic errors. The great difference between myself and others, I presume, is, that I am willing to admit my blunders and failures, while they may be indisposed to do so. None but the man who feels that he is right, can afford to say, "I was wrong.' '

Art. IV.—*On Inflammation: its Proximate Cause and Methodus Medendi.* By J. P. Batchelder, M. D. (Continued from page 168.)

Of the Proximate Cause of Inflammation.

By the proximate cause we mean: "That phenomenon in the body or part, most immediately preceding the state which we call disease; and without which previous phenomenon the disease is not known to exist."* Two theories relating to the proximate cause of inflammation have been promulgated, which are diametrically opposed to each other. On the one hand, it has been urged that increased action is the proximate cause: on the other, diminished action; and in the maintenance and vindication of both there has been no lack of zeal, ability or ingenuity, on either side.

In reference to the first we respectfully ask: Does increased action constitute "that phenomenon which immediately precedes the state which we call disease, and without which previous phenomenon, the disease (inflammation,) is not known to exist?"

---

* The above is Parry's definition of the proximate cause,—the best extant.

If the exciting cause induce contraction of the minute vessels, the only mode of increased action of which they are capable, the fluids they contain will be forced out, and they, (the minute vessels,) will in consequence be reduced to a state of comparative depletion; a condition utterly incompatible with the existence of inflammation, which requires as the very essence—the *sine qua non* of the disease, an absolute distention, or over-distention of the capillaries. Believing, however, that the very best method of getting rid of a false theory, is to establish one that is true, and particularly as we wish to avoid even the semblance of aggression, we shall push this point no farther; but turn our attention to the opposite theory.

It is admitted by all that there is more blood in a part when inflamed than in a state of health: and it is also affirmed by microscopical observers that that fluid moves through the vessels of the part affected with greater rapidity than when the circulation is normal; but these facts, if indeed the latter be a fact, have no relation whatever to the proximate cause which relates solely to the manner in which the increased quantity of blood gets into the vessels. An agent, acting mechanically, chemically, or physically upon any part of the system, which makes an impression exterior to the vessels stronger than that made by the fluids within, will in obedience to the law that the stronger effaces the weaker impression, induce them to forego their resistance; and yielding, allow themselves to be distended, or over-distended until they resist painfully. We have then distention of vessels, the primary symptom; redness, the second; and pain, from resistance, the third; the trio, which constitutes the formal and technical existence of the disease—the assemblage by which it is recognised. Now what but diminished action could have preceded this "state which we call disease?" Had the action of the capillaries been increased, no such result could have followed, even by possibility: neither could it have occurred if those vessels had not relaxed, yielded and suffered themselves to be distended or over-distended. We infer then that the proximate cause of inflammation is a suspension of the normal resistance; a relaxation; a yielding; a diminished action of the capillaries of the part that admits, upon hydraulic principles, of the inflowing of fluids by which they (the capillaries,) are over-distended. This want of action, this non-resistance, continues until the distention has proceeded so far as to excite actual resistance in the capillaries, and then, and not till then, can we affirm the existence of the disease. The action of the vessels is then increased. This increased action, the final end and natural consequence of which is, not only to prevent the additional influx of fluids, but to force them out of the inflamed part, constitutes the true *vis medicatrix naturæ*; for it causes, or attempts to cause, and if successful does cause, the reflux of fluids into the general circulation, which is equivalent to an evacuation by art. In both instances the vessels are depleted. This result, (the depletion of the vessels,) we deem, as before stated, the only legitimate termination of inflammation—whether brought about by the efforts of nature, by remedies, or the conjoined operation of both.

It has been asserted, that there is not only more blood in an inflamed part, but that it moves through it more rapidly than in health, and that there is, therefore an increased action. Neither of these facts concerns the proximate cause ; the stage of the disease having gone by for that. Relating wholly to the proximate effect, they confirm our doctrine.

The exciting causes of inflammation, as we have shown in a former paper, diminish resistance in the capillaries—venous as well as arterial ;—consequently, as much, and even more blood will be admitted into them, and transmitted through the inflamed part than in health. But this condition of things cannot last long ; because the fluids, changed in their chemical and physical properties, will be forced in every direction upon vessels which have not been subjected to the exciting causes, and therefore do not participate in the morbid actions of the part. Those vessels, thus acted on mechanically, by fluids chemically and physically altered, promptly set up a resistance to the *vis medicatrix naturæ*, the exertion of which is to force the fluids out of the vessels of the inflamed part ; a result which may be, and most generally is, prevented by the aforementioned resistance of the surrounding vessels. A pause now ensues ; the fluids stagnate in the centre, around which, and towards the circumference, the vessels being distended to a degree which constitutes congestion, relieve themselves by the effusion of fibrine, with which the blood abounds during the phlogistic state. This fibrine, the effusion of which has depleted the vessels, becomes organized, and furnishes a barrier to the further extension of the mischief. Beyond said barrier, serum is poured out in such quantities as to occasion the œdema that often accompanies inflammation, and evinces diminished intensity wherever it exists.* For the foregoing reasons we have come to the conclusion that decreased action is the proximate cause of inflammation.

INDICATIONS AND METHOD OF CURE.

It is undoubtedly the duty of the practitioner to endeavor at all times to prevent disease ; but as this paper has respect to cure rather than prevention, we shall omit to notice the indications which relate solely to the latter, except to remark, that those which pertain to prevention look directly to the proximate cause ;—the reason is obvious, for without " that phenomenon, the disease is not known to exist ;"—and indirectly to the remote and exciting causes, they being essential to the production of "that phenomenon," the causa proxima.

As medical men, we must not, however, lose sight of the fact, that the remote and exciting causes, when present, tend to keep up the disease, and therefore have in such cases a strict relevancy to the cure. The first indication, then, is to remove them. But as they are often absent, and the disease apt to go on after their removal, we do not regard that matter as coming fully within the scope of this paper, and consequently, omit its farther consideration.

---

* This œdema is very apt to take place as above described, in inflammations of the larynx, and particularly about the glottis, and constitutes the principal cause of danger in many of those cases, especially if conjoined with spasm of the muscles belonging or appertaining to those parts. We shall consider this effusion of serum in connection with another part of our subject.

Having endeavored to explain the manner in which this over-distended state of the vessels, the proximate effect is produced, we shall now consider—1. How it is kept up. 2. The method and means by which it is removed.

1. How is this over-distended state of the vessels—the disease, (the immediate effect of the proximate cause) kept up?

The action of the heart, (whether increased or not,) with the elasticity of the larger arteries, constitutes the *vis a tergo*—the power behind—which continually and unceasingly forces the blood along into the capillary vessels of the inflamed part; and so maintains and keeps up their over-distended condition. But why does not the blood pass through and out of them as fast as it enters? Having briefly referred to this point in connection with the *vis medicatrix naturæ*, we shall proceed to consider it more particularly in relation to one of the indications of cure.

It has been shown, that if a hollow viscus having an outlet, or capillary having a pore, be suddenly distended, or from any cause whatever made to act inordinately, the sphincter or pore, resisting as suddenly and violently, would hold fast and prevent the transmission and egress of the distending fluid; thus in consequence of the *vis a tergo*, constituted as described, on the one hand, and the resistance of the pores on the other, the over-distended state of the vessels, which comprises the very essence of the disease, is kept up in all its intensity. The conflict is then between the heart, the capillary vessel, and the pore; or, more particularly, between the first and the last. And the practitioner who has most skill in adapting remedies to the adjustment of these opposing agents and actions, will oftenest succeed in curing inflammation.

To comprehend this matter *in extenso*, it should be remembered, that the capillaries and pores on the inner and outer surfaces, as the skin and mucous membranes, and internal organs, as the liver and kidneys, are in a state of distention and resistance, hence the dry skin, parched tongue, constipated bowels, paucity of urine and bile, which go to make up the *tout ensemble* of the symptomatic fever of inflammation; or the phlogistic diathesis. Now, the mere softening of the skin, or the appearance of moisture on the tongue, its tip or edges for example. indicates the yielding of the pores in those parts, and foretokens a general relaxation. They are, indeed, the harbingers of the diarrhœa, copious sweats, and flow of urine, secretion of bile, &c., which constitute the crisis, so much reckoned on by the older physicians. Although the quiescence, or abatement of the heart's action precedes and contributes to the relaxation, effusion, &c., it should not be forgotten, that the perspiration when general, in its turn, like blood-letting, relieves the heart, and is therefore the precursor of permanent amendment in inflammation as well as in most fevers. The same may be said of the other evacuations.

In the normal condition, and under healthy action, the pore or sphincter, first in the order of events, relaxes; but in inflammation, for wise purposes, this order of events is reversed. If the pores yield while the *vis a tergo* continues, the effusion of fluids from the several kinds of vessels involved, will be so copious as to destroy either the structure or function of the part or exhaust the patient;—therefore, they (the pores) must not yield. Shall the vessels forego their resistance? if so, they will be more and more distended by the action of the heart, until they lose their vitality, and gangrene will be the result; therefore, they must not relax.

As our leading indication of cure flows from this doctrine, as a natural, regular, and legitimate deduction, and the success of our treatment depends mainly on the principles it involves, we hope to be excused for attempting to exhibit it free from obscurity, or risk of misapprehension.

Referring then to the urinary bladder, as furnishing the most familiar and favorable example for illustration, we say we can recollect no instance of retention of urine in which the sphincter yielded and permitted that fluid to pass incontinently before that viscus had become fatigued (paralyzed as the common phrase is,) and ceased from, or remitted in some good degree its inordinate expulsatory efforts, thus affording a most happy elucidation of a law, certainly very general, perhaps universal: that the sphincter or pore does not yield prior to the abatement of the *vis a tergo*, or in other words, until the equilibrium between the action of the viscus and its sphincter, or the capillary and its pore is restored. The reasons for this are indeed quite obvious. Soon as this equilibrium is established, the sphincter relaxes and allows the urine, as in the example adduced, to escape through the urethra as fast as it enters the bladder by the ureters.*

---

* What are the practical deductions from this doctrine in relation to the medical treatment of retention of urine, one of the most distressing "ills flesh is heir to?"—also in respect to other affections of the bladder and urethra? They are, 1. Induce the patient to refrain as much as possible from all straining, or efforts of an expulsatory character. 2. Bleed to fainting (if warranted by the circumstances of the case,) which suspends for a time the action of the bladder, and the resistance of the sphincter, and both may and often do participate in the spontaneous relaxation which takes place in the capillaries over the whole system when the patient recovers from the syncope induced by the bleeding. 3. Give a full dose of opium which lessens the sensibility of the bladder and its sphincter, and likewise the action of both. In retention there is not a more efficient remedy than opium, in a liberal dose, from two to four or five grains, according to the severity of the symptoms or urgency of the case. The warm or hot bath is often an excellent adjuvant, and in connection with the other measures prepares the way for the surgical treatment—the introduction of the catheter, with which it will be well to commence, in most cases, unless contra-indicated. In the early part of the disorder simple exposure of the naked body to the air, or dashing cold water on it by the pailful, (causing capillary contraction) disturbs the morbid relation which obtains between the bladder and its sphincter and causes the urine to flow. A similar course, so far as voluntary effort is concerned, may be pursued, with propriety, in the treatment of most diseases of the bladder and urethra, attended with difficult micturition, which are always made worse by the straining of the patient, from which he should be instructed to abstain as much as practicable and trust solely to the powers of nature, spontaneously and uncontrollably exerted. Moreover it should be recollected that derangement of function gene-

So when the capillaries are over-distended and act inordinately the pores do not relax before the action of the heart has somewhat abated; and this is as it should be, for if they relaxed, prior to the

---

rally precedes organic disease; and particularly in these organs, that form of malady is often brought on by the injudicious exertions of the individual, which more and more disturb the function and of course increase the affection; which in turn disorders more and more the function and excites to more strenuous exertions. It is, therefore, the duty of the practitioner, especially in the incipiency, and indeed through the whole course of these complaints, to caution and advise the patient on these points, and he will have the satisfaction of finding, that if no cure is effected, the progress of the disease will be retarded. This doctrine has a no less strict and practical bearing on the functional disorders of other hollow viscera, having sphinctered outlets, as the uterus, rectum and stomach. In obstetric practice it is of no ordinary importance. The uterine contractions have for their object, 1. To open the mouth of the womb. 2. Expel its contents. Now the os tincæ holds the same relation to the uterus as sphincters do to other organs with outlets; the law or principle of action is the same in all, which is, if the organs act gently or normally the sphincters relax; but if suddenly or inordinately, they hold fast, or contract the more energetically; and this is just as it should be, for great inconvenience and misery must follow, if the sphincters yielded on every occasion, when the organs with which they are connected contracted suddenly or violently. If then the uterus should act irregularly or too forcibly, the os tincæ would, as in duty bound, like other sphincters, not relax or suffer itself to be dilated; but resist the more strongly in proportion to the inordinate action of the womb, and of course retard or prevent the expulsion of its contents.

The abnormal action of that organ arises from two causes, viz.: the voluntary efforts of the woman, and too great determination of blood to its substance. 1. The cause which most frequently disturbs the equilibrium between the action of the womb and its sphincter is the voluntary bearing down of the patient herself. Parturition is mainly a function of organic life, and the power by which it is performed is of course one of its attributes. Now then, the voluntary power which belongs to animal life, should be neither invoked, nor allowed to be exerted when it can be prevented, which it can be to a considerable extent if the patient be docile and is instructed and urged to refrain from its exercise, a thing she will endeavor to do of her own accord, after having realized the benefit during a few pains. The primary object of uterine contraction is to open the os uteri preparatory to the extrusion of the contents, and so long as this process of dilatation is going on, or until it is completed, all voluntary efforts are prohibited by the nature of the case; they are not called for, do no good but much evil, for they aggravate suffering and retard labor by forcing the contents of the womb violently against the sphincter, which causes it the more pertinaceously to resist.

When the os is fully dilated, it may be supposed that moulding and adapting the presenting part, and its transit through the passage would be hastened if the pains were increased by the voluntary bearing down efforts of the mother; but it must not be forgotten that the process still belongs to organic life; and that therefore, all such efforts should be withheld, and Dame Nature, who is never thwarted with impunity, be allowed to have her own way, and the female attendants, ever ready to interfere on such occasions, with their advice, at least, made to stand by in silence, and let her dameship have fair play. When the presenting portion comes to press on and distend the external parts, the process assumes a mixed character; the parts to be dilated belong to animal life, but nature, true to her principles and purposes, has ordained that the power, by which the distention of these parts as well as the expulsion of the child is to be effected, remain still an attribute of organic life; therefore the volitions of the patient must be excluded as worse than useless.* The policy and practice inculcated should be pursued to the end of labor. By so doing the suffering abatement of the action of the heart, there would be nothing to oppose or prevent the effusion of fluids in such quantities as would, in every instance, derange or destroy the function or structure of the part or organ in which the disease was located. When the *vis a tergo* continues, and the pores persist in their resistance, the capillaries may resist until they lose their vitality, and we shall have what is technically called gangrene; but this never happens, as the result of inflammation, without the concurrence of the two contingencies just mentioned. If the pores yield there may be disorganization,

---

* If encouraged or allowed to make much voluntary exertion, she may become too much debilitated or exhausted to complete the labor, hence the demand for instruments, for which there will be very little need if the course recommended be followed.

---

is greatly mitigated and the danger of laceration dwindles to a point. Having practised according to this system during the principal part of his professional life, the writer has known a great number of women pass through even first labors with comparatively little suffering. Some have declared, in one hour after delivery, that they felt well, as if nothing had happened, and indeed, the whole getting up has been of a piece equally favorable and satisfactory. The principal difficulty has often been to keep them quiet, and exercise the degree of caution deemed necessary to secure them from the inconveniences and perils which so naturally cluster around the puerperal woman. This will be readily comprehended when it is considered that voluntary efforts alone produce fatigue; hence the fatigue, debility and exhaustion, from the effects of labor, are to be chiefly traced to the strenuous exertions put forth by the patient. Women, in the savage state, practising upon this principle, bring forth with little suffering or inconvenience, and not unfrequently has the writer witnessed the same thing in civilized life, even in primiparous cases. The women, I know in one and doubt not in both instances, refrained from voluntary exertion, and so far as child-bearing was concerned were on a level. The chloroform, by merely suspending volition, performs all that is really required of it as an anæsthetic agent in obstetric practice. After all, it is the fiat of the Almighty that women " in sorrow shall bring forth children," but the malediction neither demands that she should suffer beyond what is necessary, as a punishment for having disobediently followed the bent of her own inclination, nor prohibits attempts to mitigate her sorrows.

2. Too great determination of blood to the organ, and abnormal quantity of that fluid in the capillaries of the uterus, stimulates them to contract, and they do contract violently in order to force it out. Now, what all the vessels of an organ do, that will the organ itself as a whole do; hence, the violent action of the womb under such circumstances, and the simultaneous or consecutive action of its sphincter, which resists dilatation, and of course prevents the expulsion of the uterine contents. This state of things may be suspected when there are strong pains with little effect, other than distressing the patient,—when the pulse is full, frequent, or perhaps hard, with hot skin, thirst and restlessness; but it may be ascertained to a certainty by the *touch.* The os will then be found dry, tender, and unyielding,—often but little affected by the pains,—sometimes contracting instead of dilating during their existence, notwithstanding their violence.

When the equilibrium between the action of the uterus and its sphincter is disturbed from this cause, bleeding until the pulse falters, or fainting approaches, equalizes the circulation, removes the disturbing cause, restores the balance of power and action between the viscus and its outlet, and the labor progresses with all due expedition. Tartar emetic in nauseating doses, will sometimes do the same. We not very unfrequently find pregnant women near the time of confinement, complaining of what are termed " false pains," which are no other than the contractions of portions of the uterus whose capillaries contain an undue proportion of blood, that stimulates them to contract, while those in other portions having only their proper quantity, remain quiecent. These are distinguished from the true pains by producing no effect upon the os. They disturb and harass the patient, and sometimes the young and inexperienced accoucheur, who does not exactly know what to make of them, or what to do to remove them; but he may derive comfort from the assurance that a small bleeding or two, with some castor-oil, will equalize the circulation, and consequently remove the difficulty.

but not mortification; if the *vis a tergo* cease prematurely, the vessels may not be able to relieve themselves or even maintain their vitality, and gangrene be the result; but it cannot be said in the strict and legitimate sense of the terms that gangrene has been produced as the consequence of inflammation. To repeat, the conflict is between the *vis a tergo*, the capillaries, and their pores. In health, the last yield for the relief of the former; and the same order of function obtains in this disease; if moderate, the relaxation of the pores unloads the vessels and cures the inflammation.

2. The method and means by which this over-distention of the vessels is removed.

This branch of the inquiry embraces the indications of cure proper; to the consideration of which we now proceed.

From the foregoing principles and doctrines it may be inferred that relaxation of the sphincter or pore is the ultimate object to be aimed at by the practitioner; but to effect that with safety, the *vis a tergo* must be diminished; until that is done the sphincter or pore should not relax, and probably never would relax if the disease were intense: Hence the natural, regular and legitimate deduction, that to lessen the *vis a tergo* so as to restore the equilibrium between the vessels and the pores, is the first indication of cure. Now the *vis a tergo* cannot in every case, or indeed in a majority of cases be so far diminished as to secure this result without endangering the life of the patient; therefore a second indication is required, which is: to lessen the effect of the fluids impinging against the inner surfaces of the capillaries, which excites them to inordinate action and disturbs the harmony of function between the vessels and the pores.

If the foregoing were the only indications, it is obvious that even they could not invariably, or under all circumstances be fulfilled with safety; therefore, a third indication is demanded; which is: to diminish or take off the resistance of the pores. A fourth indication relates rather to the removal of consequences, than to the cure of the disease. For example: to remove from the part affected whatever has been effused or secreted by which the vessels have been emptied, and the inflammation cured; but which if allowed to remain might impair, interrupt or destroy the function or structure of the organ or part.

FIRST INDICATION OF CURE—THE DIMINUTION OF THE VIS A TERGO.

In health the *vis a tergo* is kept up by the normal action of the heart, aided by the elasticity of the arteries; and in inflammation it is rendered more intense by the increased action of that organ, induced by the augmented quantity of arterial blood admitted into its substance. If this increased action of the heart be produced and kept up by the augmented quantity and perhaps also, in some degree, by the vitiated quality of the blood thrown into its substance by the coronary arteries, reason and common sense alike dictate the propriety and necessity of lessening the quantity of that fluid.

The method, then, of fulfilling this indication is, 1. By the antiphlogistic regimen, which comprises perfect quietude of body and mind; pure air, abstinence, diet and proper temperature. When the phlogistic diathesis prevails, digestion is disturbed; chyme, badly formed; assimilation, imperfect: the fluids, changed and unhealthy, make a strange and novel impression on the inside of vessels and stimulate them to irregular and morbid actions: the withholding of food lessens the circulating mass; diminishes the power by which it is moved, and abates the morbid sensibilty which feels its impulsions; results, which extend to organic as well as animal life. For these reasons, nature and theory both suggest diet and regimen; and experience confirms the suggestion; the quantity and quality of the ingesta are therefore matters worthy of consideration.

2. By blood-letting; general and topical.

GENERAL BLOOD-LETTING.

If the quantity of blood be considerably and rapidly diminished by venesection, the vessels of all parts, diseased as well as others, feel the effect; that is, they contract *pari passu* with the abstraction of their contents: If syncope, which consists in an universal and extreme contraction of the capillaries, be induced, the fluids in the inflamed as in other parts will be forced out of them (the capillaries) into the larger vessels.*

Now this violent and universal contraction of the capillaries must be followed by a spontaneous relaxation, or the patient will certainly and quickly die.† This relaxation is usually manifested first in parts abounding with capillaries, as the face, upper part of the chest, and finally over the surface generally; hence we find the former portions and frequently the whole skin covered with perspiration before the capillaries of the brain and heart, acting in sympathy with those of the integuments, have relaxed. A wonderful provision of nature this! For exactly in proportion as the capillaries of the surface are filled, those of the internal organs will be relieved of a portion of their contents; so that this relaxation and consequent filling of the cutaneous capillaries really and truly answers for the time being, and permanently, if kept up as it should be, all the purposes of an abstraction of blood.

---

* The practitioner who has ever bled a patient, laboring under conjunctivitis, to fainting, must have observed that all the symptoms and phenomena of inflammation have disappeared, and that owing to the shrinking of the capillaries the diseased eye had indeed become as bloodless and white as the other.

† There is one case in which this contraction of the minute vessels is not followed by the spontaneous relaxation of which we have spoken, and that is when the principal artery in a limb has been tied, or the circulation through it wholly and suddenly obstructed; contraction of the minute vessels necessarily ensues; a sense of coldness is experienced and the temperature actually falls several degrees; the surface assumes the anserine appearance without the redness, and the hairs stand off more at right angles. In a few days the limb seems to resume its natural warmth and is generally supposed to become preternaturally warm; but this is apparent—not real; it is the effect of the additional clothing in which the limb is usually invested; when that is removed and the two limbs exposed to the air, the temperature of the one still falls considerably below that of the other.‡

The great practical deduction to be drawn from the fact that this species of contraction is not followed by spontaneous relaxation, is the propriety and necessity of additional clothing to prevent too great contraction which might be productive of speedy gangrene; and of withholding warm applications which might induce a relaxation and over-distention of vessels that could not be sustained and mortification would no less certainly follow.

‡ The verity of these observations I have recently had an opportunity of testing in a case in which the external iliac artery was skilfully and successfully tied by my friend and associate Dr. William H. Van Buren, of this city.

In order to make the most of this spontaneous relaxation, it should be borne in mind that it may be increased and prolonged much beyond what is natural by the administration of a full dose of opium, immediately on the recovery of the patient from the fainting caused by the bleeding. By depriving the vessels of a portion of their organic sensibility, the narcotic influence of the drug co-operating with the law of the system, carries this relaxation much beyond what is natural, and moreover holds the vessels in that state of dilatation some ten, twelve or sixteen hours, or until a considerable time after the specific effect of the medicine may be supposed to have ceased, during which the patient is easy, and comparatively free from disease. By this method or mode of practice an inflammation of a formidable character may be terminated at a blow; a dose of salts or castor oil completing the cure. If the symptoms return, the same process should be repeated; modified according to circumstances. Or if again; an occurrence which we have seldom witnessed, they must be met in a similar manner; or by such other means, as the judgment of the practitioner shall dictate, as the warm bath, &c. When the intensity of the disease has been considerably lessened and the powers of the system enfeebled, the pleasant impression made by the physical influence of heat and moisture will induce a degree of relaxation that will remove the pain which still afflicts the patient, and so prove a substitute for the lancet.

This relaxation is not confined to the vessels of the inflamed part; but extends to all the capillaries and especially to those on the surface; they being more particularly subjected to the aforementioned instrumentalities. Into them the blood will flow, and so long as it there remains, both the heart and the site of the disease are freed from its influence; a result equivalent to an evacuation. On this principle and under such circumstances, I am in the habit of resorting to the warm bath, as to venesection, so often as the pain returns, and therefore keep the tub nearly filled in the sick room that by the addition of a small quantity of boiling water the temperature can be raised to the requisite degree and the patient immersed; and on the removal of the pain, returned to bed; after which anodynes. or sudorifics, as the James' powder, with or without opium may be administered in order to hold what had been achieved by the bath. The foregoing practice may be pursued in croup, laryngitis, and other inflammatory affections complicated with spasm or irritability, by the skilful practitioner.

The number of inflammations of a purely unmixed character, or free from all complication with one or the other circumstances just alluded to, are very few—fewer indeed, according to my observations, than is generally supposed. In a large proportion of cases in the great cities, all the symptoms are aggravated and the disease kept up, to the detriment and often danger of the patient, by a vitiated condition of the circulating fluids—a condition which requires that depletion and narcotics should be blended—the one for emptying the vessels*—the other for lessening their morbid sensibility, which prevents their feeling and responding to the impressions made, not only by the momentum of the circulating mass, but by its irritating qualities.†

Determination of blood to the head does not preclude this practice of giving opium according to the principles laid down, unless the substance of the encephalon, the nervous centre itself, is seriously involved; in which case it may be questionable, owing to the fact that the narcotic acts directly on the nervous system.‡

In many cases analogous to those in which the warm bath is so useful, a ligature applied to the thighs near the body, sufficiently tight to interrupt the return of the blood through the veins without at all interfering with its passage in the arteries, may be made to answer the purposes of an evacuant. When these ligatures can be no longer borne on account of the uneasiness and discomfort they occasion, they may be removed and applied to the arms near the axillæ. This use of the ligature will be recognized as being in perfect accordance with the principles laid down.‡

The safely and success of this practice, it will be seen, depend on the great and certain relaxation that takes place in the capillaries over the system, and which is, as long as it lasts, equivalent to evacuation. In order to secure that result, the narcotic must be given in a full dose. It is not required that we should always bleed to fainting. A small bleeding of from eight to twelve ounces will often answer the purpose, and that too in many cases in which the opiate, but for the bleeding, would have aggravated every symptom. Again, the vehement contraction of the capillaries throughout the system, during fainting and the subsequent relaxation, will have so adjusted the balance of circulation, even without the narcotic, that the vessels of the diseased part will be able to resist, for a time at least, the *vis a tergo*, and prevent the intromission of fluids in an abnormal quantity: hence the remission of symptoms which so generally succeed a decided bloodletting. But the capillaries of the heart, like those in other parts, may, and often do, sooner or later, relax and re-admit more blood, which causes its action to be renewed with so much energy that the vessels of the inflamed part, unable to resist the impelling force of the blood, yield to its impulse and are again over-distended; a condition indicated by the recurrence of pain and suffering, which calls for a repetition of the bleeding. Several bleedings may be, in fact, required before the equilibrium between the *vis a tergo*, the capillary and the pore is restored. When that has been accomplished a free and general perspiration usually breaks out.

---

* From observation, the writer is convinced that the lancet might be used with advantage much more frequently than it is, in the large towns.

† The practice of giving opium after bleeding, which has been just detailed, so far as the writer is concerned, sprang from a remark of Darwin, that a bleeding immediately preceding an opiate, increased its efficacy. The gentleman with whom he commenced the study of medicine being a great admirer of that author, adopted the suggestion, and often bled patients to whom he was about to administer an opiate. Having frequently witnessed the salutary results of the practice, he also adopted it; and from repeated trials discovered that the principle and practice were susceptible of a much more extensive application than was at first apprehended—that in fact opium might be given, not only with safety, but with the happiest effect in cases of inflammation, if bleeding were premised, in which, according to the theories then in vogue, it would have been utterly inadmissible. Encouraged by success, and emboldened by a tolerably-enlarged experience, he came at length to use it in the manner now recommended, and is unable to call to mind a single instance in which he has had reason to regret having done so.

‡ During the last season, I was called to a lady whose case bore the strongest marks of determination of blood to the head I had ever witnessed without positive ymptoms of grave cerebral disturbance. I was never in more doubt, whether or not to adopt the practice which has been recommended; but confidence in the principle prevailed. The lady was liberally bled; took a grain and a half or two grains of opium and six grains of the pulvis antimonialis, and was, literally speaking, well the next day; a profuse prespiration having followed.

When the case is left to nature, this result is brought about in another way. The heart, the capillaries, and the pores experience fatigue, and must have rest; to obtain which they forego action and resistance. and the balance of circulation is restored. The morbid phenomena disappear, and nature is said to have performed the cure. But why is she not always competent to do this? Because the heart with that "charity which begins at home," first supplies itself with arterial blood through its coronary arteries; the consequence of which is, that its own action is increased, by which more blood is thrown into its capillaries, and its increased action is thus kept up so long as the mass of blood remains undiminished, or until the capillaries (the antagonists of the heart), in every part of the body, have relaxed and become filled with blood; a state which so far as it goes, and so long as it lasts, is equivalent to an evacuation, because considerable time must elapse before the blood, thus distributed, can find its way back to the heart. That organ, thus acting, and re-acting upon itself, will continue its augmented efforts until either the capillaries of the diseased part have lost their tone or vitality; or, until exhausted by its own over-action, it has become too feeble to sustain the vital functions; hence, any sudden and considerable subsidency of the pulse in a case of inflammation, indicates either commencing gangrene, or approaching dissolution. For these reasons we conclude that nature is not competent to cure all cases of inflammation.

Venesection, as it is skilfully or unskilfully employed, is potent for good or for evil. It is therefore, important that definite rules should be laid down for determining—1. When it should be resorted to. 2. When the proper quantity of blood has been drawn. 3. When the operation should be repeated.

1. When is venesection to be employed?

In order to answer and settle this question, we must constantly keep in mind, that the specific object of blood-letting is to lessen the *vis a tergo* by diminishing the quantity of blood in active circulation. The fulness, hardness, and sometimes the frequency of the pulse, in connection with other circumstances of the case, indicate the propriety and necessity of bleeding. Hardness and softness of bodies, are the qualities which enable them to resist impressions; and in feeling the pulse, they are measured by the degree of muscular contraction, which forces the finger against the artery, and the resistance opposed by the vessel to that contractile effort. The pulse should be examined in both wrists, for it is, now and then, occasionally soft in one and hard in the other; a condition which calls equally for the lancet, as if hardness prevailed in both. If there be perplexity and doubt, it may be well to feel the pulse in other arteries, as the carotids, &c. The pulse, however, is not always to be relied on; for there are cases in which neither its hardness, tenseness, nor fulness is very manifest, and yet bleeding may be proper, and even necessary. In such cases the heart must be appealed to and examined. If that organ beat strongly, it will be right and proper to bleed,* as suggested by Laennec,—a suggestion of great practical importance as furnishing a criterion for the safe and proper use of the lancet under very perplexing circumstances.

The condition of the diseased part may likewise assist us in deciding upon the propriety of venesection; for the exalted sensibility, and over-distended, stretched, and resisting state of the vessels of the part are declared and measured with tolerable accuracy by the feelings of the patient, pain on pressure, &c.† If the pain be severe, abstraction of blood is required for relief; but there are cases in which neither the pulse, nor the state of the part, nor the feelings of the patient, actually demand the lancet; yet, a small bleeding will nevertheless prepare the system for other remedies; especially the antimonial powder and opium; a dose of the latter, preceded by a moderate bleeding, will frequently give the most effectual relief, which but for that would have aggravated all the symptoms.

---

* If the action of the heart be strong, we may bleed, although the pulse is feeble, and vice versa,—if the action of the heart be feeble and the pulse strong, we may not bleed at all, or with great circumspection. I have been long in the habit of observing this rule, and have never been misled by it.

† Notwithstanding the tenderness of an inflamed part, the pain caused by pressure, although an almost invariable concomitant, is by no means peculiar to inflammation; but is often connected with hysteria, or other nervous affections. In these, the exaggerated sensibility or tenderness, is confined to the surface, and is owing to excessive innervation of parts supplied by the peripheral extremities of the sensific nerves. Under such circumstances, pressure, whether local or general, even if continued for some time, and considerably increased so as to affect deep-seated, or internal parts, soon ceases to be felt or complained of, if the attention of the patient is diverted by conversation, or in any other way. To become diagnostic in inflammation, pressure should be made on a point, suddenly; which forces the blood out of the vessels where it is applied, into those adjacent, and produces an aggravation of the pain; why? because the vessels in an inflamed part are all in an over-distended, stretched, and resisting condition, which is increased by the displaced fluid, being forced into those immediately contiguous, by which they are still more distended and stretched, and the pain consequently aggravated. When pressure, instead of being suddenly and locally made, is applied gradually, generally, and equably, the pain will often be not only not aggravated, but actually alleviated;—for the pressure has, to a certain extent, lessened the quantity of fluid contained in the vessels. Upon this circumstance the utility of compression, as a remedy, depends. But if the vessels be not emptied by the pressure, additional inconvenience will be experienced from it as well as from the distending influence of their contents.

2. When has the proper quantity of blood been drawn ?

By discriminating accurately between a preternatural fulness and distention of the heart and arteries as hollow organs, and an over-distended state of the capillaries, as in inflammation, involving many vessels, we may often pre-estimate how much blood should be drawn. When the accumulation is mainly in the cavities of the former, (the heart and arteries,) the abstraction of blood is direct, and likewise its effect ; consequently, a small quantity will answer the purpose ; but when the latter (the capillaries) are implicated to any considerable extent, the quantity must be larger, in order to cause them, like the heart and arteries, to feel that the mass of their contents has been lessened. As this mode of judging may not be deemed sufficiently accurate for scientific and practical purposes, the sensations of the patient, state of the pulse, action of the heart, &c., should be taken into the account as the principal and most reliable means for determining not only whether it is right and proper to bleed at all, but also when the suitable quantity of blood has been taken.

The rule then, is to let the blood flow until the pain abates or ceases ; till the pulse flags or falters or syncope is induced, which last affords plenary evidence that enough has been lost. To that point, in severe cases, should the bleeding be carried—generally. In such as are milder, the flow of blood may be stopped when the changes in the pulse and feeling aforementioned are manifested. In cases of a mixed character, although some blood may and should be drawn, yet so much only as will relieve the fulness, or over distention of the capillaries need be abstracted. In such, and indeed in all cases in which it is practicable the patient should be bled in the erect or sitting posture, because he will generally become faint just when the proper quantity of blood has been lost, which in mixed cases will be small compared with what it would be if the disease had been purely inflammatory.

In every case and under all circumstances, in which bleeding at all is proper, it is desirable and even indispensable that a certain quantity of blood, proportioned to the severity of the disease, should be drawn before fainting is produced ; and as some persons faint very easily, from fear or the loss of a little blood, it will be best to place the patient in a recumbent posture and allow him to remain in it until the quantity deemed requisite has been abstracted, when he may assume the sitting or erect posture and the blood still allowed to flow until syncope ensues. By so doing we may economize in the loss of blood and gain all the advantages, and avoid the disadvantages which may accrue from a bleeding. The question may be here asked with propriety, why is fainting to be considered one of the criteria by which to determine how far the loss of blood should be carried ? In fainting there is, as has been remarked, a universal contraction or shrinking of the capillaries, as well those in the inflamed as in other parts. Nature seems, so to speak, to take advantage of the enfeebled state or temporary quiescence of the heart to force the contents of the capillary vessels back into the larger vessels, and likewise through the pores, which in health constitute a portion of the power antagonistic to that organ, but now, in consequence of its diminished action, forego their resistance ; hence the sweating which so frequently accompanies or follows syncope, and which is often cold, resembling that occasioned by the contraction of the capillaries in the moribund. If the fainting be incomplete, a warm sweat may be the immediate consequence. For an obvious reason we should be in no hurry to remove the syncope; as a general rule the longer it continues and the more slowly it goes off, the better.

3. When should the bleeding be repeated.

The return of the pain, after having been relieved by venesection, is a sign of the renewal of the *vis a tergo*, and also of the resistance of the capillaries and the pores; all of which, as in the first instance, call for the lancet—if slight, perhaps for topical bleeding only. When a repetition is proper, the quantity to be drawn is to be regulated by the rules already laid down under the second head.

As to a repetition of the bleeding, and also sometimes its first use, it is proper to remark that nice discrimination is occasionally required, in order to determine whether the local symptoms, especially when an internal organ is concerned, depend on an over-distended or an over-contracted state of the capillaries; the former produced by an augmented, the latter, by a diminished quantity, or vitiated quality of the fluids. The extremes here, as in many other instances, seem to meet—the sensations are similar—to all ordinary perception or discrimination, the same. To make the proper distinction may be difficult, but of vital importance; because, if in the first instance we stimulate, the patient may be destroyed; if, in the last, we deplete, the consequence may be equally unfortunate. If the pain and local symptoms arise from an exalted sensibility or an exhausted or depraved state of the fluids, narcotics, which diminish sensibility, and consequently prevent the vessels feeling the impressions made by the irritating qualities of the fluids, are the remedies which afford greatest, most relief. It is on this account, in part, that opiates are, as has been shown, so useful in the treatment of inflammation. The pulse, temperament of the patient, condition of the system and part affected,* are the sources whence our conclusions are to be drawn.

[P. S. The notes connected with this paper, were not read before the Academy for want of time, (one or perhaps two short ones excepted,) consequently, the writer alone is responsible for them, and their insertion in the journal.]

ART. V.—*Report of a Case of Poisoning by Tincture of Aconite—Fatal Result in two Hours.* By HENRY M. GRAY, M. D.

ALTHOUGH several fatal cases of poisoning by monkshood, are recorded by the English writers on toxicology, the writer is not aware that any have hitherto occurred in this country. In a medico-legal point of view, the importance of an accurate delineation of the symptoms, together with the mode of death, render it desirable that any authentic information upon this subject, should be recorded and preserved, and especially so, as this exceedingly energetic poison, has of late years become a fashionable remedial agent, and serious accidents from its improper use, are liable constantly to occur.

---

* See second note on page 334.

The subject of the following case was a healthy boy, 14 years of age. On the evening of October 3d. he had eaten an unusually hearty meal, and about 9 o'clock, complained of some slight uneasiness in the stomach, probably a slight enteralgia. A relative gave him a table-spoonful of what she supposed to be brandy in a cup of sweetened water. About five minutes after the dose had been swallowed, the boy placed his hands upon his abdomen, starting from his chair, and inquiring of his aunt what she had given him. Upon examination, the bottle was found to have contained about an ounce of the "Tincture Aconite Radex," of which she had given the quantity above mentioned, measured in a table-spoon.

Greatly apprehensive of the result of the mistake which had been committed, medical aid was instantly summoned I saw him twenty minutes after the poison had been taken, and found him in the following condition.

His expression did not indicate suffering, but rather alarm and apprehension, due in some measure, without doubt, to the excitement of those about him. The skin was natural as regarded temperature, although there was some pallor of the countenance. The pulse 80, regular and moderately full. *His pupils* were *slightly dilated*, contracting sluggishly upon the approach of the light. He answered all questions rationally and concisely, nor could I discover any disturbance of the intellectual functions. Muscular movements were, however, very much impaired; for on attempting to walk, he required support, the head falling upon the chest, his limbs bending beneath him, and the hands, when carried to the head, were spasmodically affected. Deglutition was performed almost incessantly, yet without difficulty, nor did he complain of any burning along the course of the œsophagus or in the stomach. He expressed himself, that his head felt very heavy and full, but his vision at this time was not affected, nor was there defect in the sense of hearing. He had not yet vomited, although there was frequent retching, with the discharge of small quantities of mucus.

Sulphate of zinc, ℈j. was immediately administered, followed by copious demulcent diluents. Ice-water douche, applied to the scalp, mustard pediluvia and sinapisms over the epigastrium, spine, etc. In a very few moments after the administration of the emetic, copious vomiting ensued. The matters ejected, consisted of partially digested aliment and mucus. The smell was intensely acid, but I perceived no odor of aconite. He now, for the first time, suffered pain in the stomach and œsophagus, describing his sensations, as if his throat and stomach were on fire. He seemed to suffer great prostration of strength, being unable to raise himself in the bed, except upon the recurrence of the violent attacks of vomiting. About 40 minutes had now elapsed since the administration of the tincture, and his case presented the following peculiarities. The pulse was very slow, ranging about 45, regular, but compressible. Skin cool, especially the extremities, which already had the icy feeling of death. The pupils were now *widely dilated*, and almost insensible to the stimulus of light. He complained of great numbness of his head, but none whatever of his limbs or other portions of his body. The internal burning sensation still continued, but the vomiting was less frequent and severe. Pressure over the abdomen caused some uneasiness. He still answered questions coherently, and several times requested that he might be allowed to get out of bed, and sit on the rocking chair. Complains that he cannot see, says the room is dark and begs that lights may be brought. Jactatition now came on, and several times he was quite violent, but was appeased with slight persuasion.

In addition to the diluent drinks, a large laxative enema was now administered; heat was applied to the extremities, and diligent frictions with stimulating liniments were made; brandy was administered every few minutes in tea-spoonful doses. Under this treatment a slight amendment took place; the pulse became fuller, some slight warmth returned to the skin, the face assumed a more natural expression, and the vomiting had nearly subsided. In this condition he remained for half an hour, when collapse again supervened. His respiration became slower and more laborious; there was *rigidity of the posterior muscles of the neck and trunk ;* the surface became rapidly cold, and he was unable any longer to swallow. The pulsations of the heart were yet distinct and regular, though feeble. He was yet perfectly conscious—for observing spasmodic movements of the bowels, I encouraged him to attempt to pass the injection, which he did with considerable muscular force. In a few moments he died, the pulse stopping suddenly in the midst of a beat.

It is to be regretted that no opportunity was afforded for making an autopsy in this case.

In comparing the above case with those recorded by Christison, Pereira and Taylor, it will be observed that while some of the leading symptoms are analogous, others again differ in a marked degree. The contraction of the pupil, observed by them as an almost invariable symptom, was here absent, and dilatation was present from the beginning. Again, convulsions, stertor and stupor are described as leading features in most of the cases. In all the cases of poisoning from the alcoholic tincture of the root, there was "numbness and tingling about the throat, stomach and extremities, and contracted pupil." In the present case, no burning was experienced in the stomach or throat until after vomiting had taken place. The form in which the poison is taken, and the amount of the dose, will doubtless modify the symptoms, and the manner of death. When an overwhelming quantity has been given, the immediate sedative effect upon the brain and nervous system may be so intense as to paralyze the heart, and the muscles of respiration, so that death may ensue without those violent symptoms of irritation of the brain and stomach, which would result from a smaller dose. In the same manner, a dilated pupil may accompany that state of brain, where the primary effect of the drug has been that of a sedative, as occurs in poisoning by prussic acid, where the pupil is widely dilated. On the other hand, a smaller dose would probably act with greater violence upon the mucous membrane of the stomach, and if its action involved the nervous system to any considerable degree, it would be that of an irritant, causing contracted pupil, head-ache and convulsions.

ART. VI.—*Case of Labor, where Delivery of the Child was accomplished through the Perinæum.* By S. C. ELLIS, M. D.

ON the 22d of December last, I attended the accouchement of Mrs. W., of Long Island. She was thirty years of age, had been married two years, and was in labor with her first child. When I arrived the child's head had commenced passing the superior straight of the pelvis, and in an hour or little more, it was pressing on the perinæum, which soon became very tense and thin. The expulsive efforts of the uterus seemed to be directed towards the anus, and there was really but little or no distention of the os externum vaginæ.

Fearing laceration, I supported the part with my hand, and used all the force that was prudent to induce the head to its proper exit, but it would not be governed by the considerable power applied, and I felt the perinæum gradually giving way under the palm of my hand like a piece of wet paper. I continued, however, to press to the vulva in a desire to save the sphincter ani muscle. All was of no avail, so far as natural delivery was concerned; for another pain drove the child's head through the perinæum, the whole body following instanter. Being anxious to see the exact nature of the wound, for the purpose of doing what might be necessary, I immediately introduced my hand through the opening and extracted the placenta, which was slightly adherent.

On inspection I found that the laceration began about an inch from the anus; first transverse and running from that on each side of the vulva, making a ragged irregular wound, at least one half of the vulva, including the entire fourchette, was hanging loose, and so completely detached that in the examination it was turned up and lay over the pubes.

Notwithstanding all this, I never attended an easier or more quiet labor, and a person in the adjoining room would have scarcely conjectured that another being was making its appearance on the scene of life. The lady complained not, neither had she any idea of the strange manner her fine large child had made his débût.

To conclude, I placed the parts in position, put a light compress over the wound, after seeing the lochia discharge through the os externum, and in five weeks she was up and about, not experiencing, as she has at various times informed me, the least inconvenience from her rather singular labor.

In this case there was no time allowed to operate had I thought it necessary, and I am now pleased it so happened. Cutting through the fourchette would not have given so large an opening, and the sphincter muscle must have been torn through, occasioning a troublesome, and, to say the least, inconvenient state of things. Had there been a hymen, I think it would not have been destroyed.

As this kind of case is not of very usual occurrence, I deemed a report of it might not be uninteresting to the profession.

PART SECOND.

CRITICAL ANALYSIS.

Art. VII.—*Lead Diseases.* A Treatise from the French of L. Tanquerel Des Planches, with Notes and Additions on the Use of Lead Pipe and its Substitutes. By Samuel L. Dana, M. D., LL.D., Member of the American Academy of Arts and Sciences, Corresponding Member of Boston Society of Natural History; of the Academy of Natural Sciences, Philadelphia; of the National Institute at Washington. Lowell: Daniel Bixby & Co., 1848. 8vo. pp. 441.

This is an American translation and abridgment of a valuable French work. The original treatise is in two volumes, octavo, comprising eleven hundred and two pages, and was crowned with the Montyon prize of 6,000 francs by the Royal Academy of Sciences, in 1841, the committee consisting of Roux, Magendie, Serres, Larry, De Blainville, Savart, Breschet, Dumeril, and Double. By the advertisement of the translator and editor, we learn "that in condensing the work he has aimed to give faithfully the meaning of the author without confining himself to a simple translation of his language, and that in selecting portions of the original to form the body of this work, he has been guided more by the practical than the theoretical results and views of the author." The work has been divided into parts and chapters, a feature not in the original; this circumstance alone, there can be no doubt, will materially facilitate the reader in obtaining a more ready knowledge of its contents, and will greatly enhance the value of the translation as a volume of reference to the general practitioner.

In the September and November numbers of this Journal for 1844, there appeared a very lengthy and able review of the original work of M. Tanquerel from the pen of the late Samuel Forrey, M.D., the superior talent and ability evinced in that analysis, and the circumstance of its comparatively recent occurrence will of necessity preclude an analysis of the body of the translation at this time, our present duty being confined to the additions contained in the appendix of Dr. Dana. This appendix comprises seventy-two pages, the first seven of which treat "*Of the Existence of Lead and Copper in the Human System.*" Involved in the question of the existence of these substances in the human system, are points of the deepest interest to the departments of pathology and legal medicine. The father of organic chemistry, Chevreul, as early as 1824, pointed out a classification which, according to Dr. Dana, is that best adapted to give clear views of the state in which these metals exist in the human body. It is as follows:

1st. Principles absolutely essential, which may not be replaced, and life continue.

2d. Principles necessary, but which may be replaced by others.

3d. Principles accidental, neither essential nor necessary.

In this last class, says Dr. Dana, it will be safest to place, at present, lead and copper. Devergie entertains the opinion of Chevreul. Orfila believes that lead is a normal ingredient of the human system. Since his views were published the fact has been confirmed by Ollivier (d' Angers), Harvy, and Boutigny. In a memoir read before the Royal Academy of Medicine in 1845, M. Devergie deduces the following conclusions:

1. All organs of man contain traces of copper and lead.
2. The proportion increases with age; it is small in the new-born infant.
3. Prolonged sickness, where alimentation is deficient, remarkably diminishes the natural quantity of copper and lead.
4. This effect is due to the origin of the metals in the aliment.
5. Copper always exceeds the lead.

Danger and Flandin strenuously deny the soundness of the opinions of the foregoing authorities, they do not believe in the existence of natural, or as they term it "physiological copper and lead." In speaking of its presence in the blood, of the sources from whence it is derived, and of the mode of its detection, &c., as stated by Millon, Dr. Dana says—

> A process for detecting lead and copper and other inorganic substances in blood, more refined than any which has ever before appeared, has been recently proposed by Millon. Its simplicity is equalled only by its delicacy. It is truly an analysis of the blood *via humida*, and seems to settle forever the question before us. In this process, blood is drawn immedately from a vein into water, then introduced into a jar of chlorine gas. It immediately coagulates, becomes disorganized, a brown precipitate falls, containing all the animal or organic matter, while all the salts and inorganic matter remain in solution in the water. This separation is so complete, that the organic precipitate, incinerated in a platina capsule, leaves only so slight a trace of the salts, that it may be due to the water which moistened the coagulum, while, if the water is evaporated dry, the residuum, burnt in the combustion tube, gives only traces of organic matter, due to the minute portion held in solution by the water.
>
> If the water is weighed before and after the separation of the coagulum, the increase of weight represents that of all the salts in a given quantity of blood, so that one may operate on a known weight of filtered liquid, as on a determined weight of blood.
>
> Blood, examined by this process, besides silex, iron, manganese, always exhibits copper and lead. The proportions are in 100 parts of the dry residuum from evaporation of the water.

Silex, . .	1 to 3	Lead, . .	1.0 to 5.0
Manganese, .	10 to 24	Copper, .	0.5 to 2.5

Are the lead and copper diffused generally in the blood, or confined to the sanguineous globules? M. Millon, from his experiments, decides that these metals are fixed with the iron in the globules, and share with it organization and life. (*L'Institut.* No. 372, Jan. 1848, *in Edin. Phil. Jour.* Ap. 1848.) It seems, therefore, that copper and lead exist naturally in the blood wherever that has been examined to detect these metals. Whether this fact will prove to be universally true, remains to be proved. Whence does the blood derive these elements? The answer is obvious—from the drink and aliments. In society, where all articles of food are so liable, as has been shown in the body of this work, to come in contact with copper and lead, it is not difficult to admit the aliments are a source of these metals. But Legrip, (*Journ. de Chim. Méd.* May, 1847,) has found copper and lead in the organs of a cow, the metals here preserving the quantitive normal relation as in man; Chevreul has found copper in beef. These must have been derived from the natural food of the animals, unsophisticated, doubtless, by the artificial processes of society. This opens the question, Do vegetables naturally contain copper and lead? Numerous chemists, Bucholz and Meissner, who first noticed copper in vegetables, Gahn, Vauquelin, Berzelius, Sarzeau, who, finding copper in plants, first suggested its occurrence in man, Boutigny and others have shown the existence of copper in a great variety of plants, fruit and grain. Its presence in wheat has long been established, and its quantity determined. From the quantity of wheat annually consumed in France, Orfila has calculated that about 8000 lbs. of copper every year enter the bowels of the inhabitants, from this source. At the meeting of the Academy of Sciences in Paris, January, 1848, Deschamps attempted to show that all soils contained copper as carbonate. It is dissolved by the carbonate of ammonia, and so is carried into plants. The natural existence of lead in plants is not authenticated, but its frequent fraudulent presence in tea cannot be doubted. Whatever may be the source of copper and lead in the organs of man in certain cases, the presence of copper naturally, in some shell-fish, as shown by Bourchardat, and very recently by Harless, in the blood of the ascidia and cephalopoda—as *Cancer pagurus, Acanthias zeus, Conger vulgaris, Eledone, Helix pomatia, &c.*, shows that copper is not confined to warm-blooded animals only.

A very interesting question naturally arises, viz.: "Is the quantity of lead naturally found in the human system increased in lead diseases?" The researches of M. Devergie, Drs. Todd and Miller of King's College London, Dr. Inman of Liverpool, and Orfila, all go to confirm us in the opinion that this is the case. Orfila has found lead in the liver of lead patients, and in his paper read before the Academy on this subject in June, 1847, he establishes the fact, "that lead and copper, existing naturally in the body, may be always simply and easily distinguished from that causing disease and death."

While speaking of the use of sulphuric lemonade as a prophylactic for those exposed to the poison consequent upon the manufacturing of white lead, Dr. Dana gives the opinion, that from the facts evolved in the dispute of Gendrin and Tanquerel on this subject, the inference may be drawn, that while the most sanguine expectations of the advocates of sulphuric lemonade have not been fully realized, yet a degree of success has attended its use, both as a preventive and curative of lead diseases, which by no means allow it to be ranked as inefficacious, as represented in the body of the work, by Tanquerel himself. But we pass by the remaining part of this portion of the subject, in which the use of the sulphuric bath is considered, and take up that portion of the appendix which treats of "*The use of Lead as a Conduit or Reservoir for Water for domestic purposes.*"

The facts which are evolved in the consideration of this portion of the work, are arranged under three heads, viz.:

1. The effects of well water.
2. The effects of spring water remote from habitations.
3. The effects of rain, pond, lake, and river water.

That well water differs materially from other natural waters does not admit of doubt. That this difference consists mainly in the presence of a great abundance of nitrates and carbonates, is equally certain. It is a matter of every day observation that well water corrodes very readily lead pipe, when used for conducting purposes; and according to Dr. Dana, it has been satisfactorily shown that lead pipes used in wells, in some cases have been perforated in six months; others, in the course of one, two, and three years; and that lead diseases from this cause are very common, he considers is equally demonstrable. These apparent assertions are based upon a goodly number of facts, which, were our space sufficient, we should give.

That spring water, being in fact nothing but the gushings of natural wells, produces similar effects, but in a much less degree, is equally certain. In illustration of this, Dr. Dana gives several instances, one of which we will give in the author's own words.—

> I have seen lead pipe which conveyed spring water, at Jamaica Plain, Roxbury, which was very much eroded and slightly perforated by the enlargement of an original defect in a part of the pipe. The water was very pure, and yet, notwithstanding a deposited coat of oxide and carbonate of lead had occurred, the erosion continued, and lead was dissolved at the end of eight years' use of the pipe. This was conclusively and positively determined, by finding lead in solution in the water, by analysis, before inspecting the pipe; and without the aid of analysis or inspection, the fact of continued corrosion might have been inferred from the abdominal pain, amounting to colic, and many other symptoms of unmistakable lead disorder which occurred in one person, whenever he drank this water.

Dr. Dana cites a remarkable instance, which occurred at Dedham, Mass., in the person of an eminent divine; and a similar instance occurred in the State Lunatic Hospital at Worcester, Mass., in 1843. The case of the Tunbridge water, in England, cited by Dr. Christison, in his work on Poisons, is another well-marked illustration of the impropriety of its use under certain circumstances. A multitude of facts are cited in confirmation of the truth of the proposition stated above, but our time or space will not allow of going into detail.

In regard to the effects of rain, pond, lake and river water, Dr. Dana thinks the same circumstances attend its use.

From repeated observations, it has been clearly demonstrated that the corroding effect of water continues even after a crust or coating has formed; and so long as the pipe is used. Such being the fact, it becomes necessary to inquire how far the use of lead pipes for conducting Croton water in our own city are admissible. Dr. Dana has furnished some data on this point, and as it is contained in a series of conclusions embracing other waters than our own, we will give them entire.

1. The water of Merrimac river, flowing through a country emphatically granitic, I find holds lead in solution when drawn through a lead pipe which has been in use for its transmission eight years, the water having stood in it some hours.

2. The water of Jamaica Pond, drawn from the leaden pipes in Boston, which had been in use several years as service pipes, I found, in 1844, contained lead in two instances brought to my notice.

Dr. A. A. Hayes has detected lead in the water of Jamaica Pond, drawn from the lead pipes in Boston, supplying it for domestic use in such numerous instances, and under circumstances so various, that it is impossible longer to doubt the continued erosive action of that pond water on lead pipe in actual aqueduct use.

3. Croton water, drawn from lead service pipe, which had been in use from the date of the introduction of that water into the city of New-York, was found in my analysis in 1846, to contain lead in solution.

Dr. James R. Chilton, a distinguished and acute analytical chemist of New-York, has also repeatedly detected lead in Croton water, drawn from lead pipes in that city.

These pipes, had, in some instances, been in use for many months, even a year.

4. Croton pipes, removed at the end of several months, are found to be much eroded in many cases. Those which had been lined with tin were found to have that coating removed in many points, and the lead there pitted. How long this action of erosion had been occurring, can be conjectured only, but as there was no evidence of its cessation, so neither is it to be inferred, that such deep corrosion could have occurred in the first few days after the pipe was used to transmit water.

The evidence of continued action of Croton water on lead, derived from chemical analysis, is supported by the fact, that at least one member of the family using water from the source whence was drawn that analyzed by myself, was affected with lead malady.

In this case, the evidence of the existence of lead paralysis and arthralgy, with many other symptoms so well described by Tanquerel, is undoubted. On ceasing to use Croton water drawn from lead pipes, the symptoms of lead malady disappeared. They were renewed when the patient, residing in the summer in the country, drank rain water which had been transmitted through lead. Thus showing it was not Croton water, but the lead it had dissolved, which was the cause of disease.

Besides, this is not an isolated case; Dr. Chilton states that several persons had been made seriously ill from drinking Croton water from lead pipes in a house in New York, (which had been closed for some time previous,) and that he had detected lead in it. (*Rep. of Consult. Phys. of Boston*, 1848.)

5. I have examined small sections of lead pipes, which had been in use transmitting the water of James River, at Richmond, Va., about twelve years. There was a fine reddish colored, and quite smooth and compact coat deposited on the inner surface of the pipe, which was easily detached, showing evident and unmistakable marks of erosion, by small pits and thread-like channels.

Pipe from Baltimore showed a less compact coat, but quite as evident marks of the action of water, which had occurred in this pipe, for several years in use.

"These facts," says Dr. Dana, "abundantly prove that lead pipe in actual use transmitting natural water, whether rain, spring, well, pond, lake, or river, is eroded or dissolved by that water, as long as the pipe is used."

There can be but little, if any, doubt, but that the foregoing propositions are true as general statements, (Dr. Dana, himself, points out exceptions,) and as such, they call loudly upon all classes of our citizens, as well as those in authority—and particularly physicians, to be ready to appreciate and detect the first development of those anomalous, delusive and diversified symptoms which arise from the poisonous effects of lead, and which we must ere long not only expect, but actually meet with, owing to the constant and universal use of lead pipe as a conductor of Croton water in this city. Bearing in mind these facts, we ought not, even for a moment, to allow our opinions to be influenced, or our judgments warped, by the comparatively limited testimony which a few months or years furnish—each day brings with it an accumulation of the deposit, and cases of lead disease which may be accounted for satisfactorily to-day upon a supposition of idiosyncrasy or particular susceptibility, the cause of which is present and at work, is gradually increasing, and will, next month or next year, there is scarcely a doubt, develop disease in constitutions where no particular susceptibility exists. Here, then, may be seen the importance of preventive measures—measures which Dr. Dana has considered when speaking *of the proposed substitutes for lead.*

Under this head, Dr. Dana considers separately the various metals, alloys, &c., which have been proposed as conductors of water for domestic and culinary purposes. From a review of the testimony furnished while treating of lead as a conductor, it is clearly to be seen, that although at first but in a small degree injurious, still after a time the oxidization which is constantly going on, soon renders it not only injurious, but positively dangerous for such purposes. This being the case, the question naturally arises : what shall be substituted—cheap, efficacious, and wholesome ? "Among the metals, copper, tin, zinc, or their alloys with each other, or with lead and iron, have been proposed." Either of the above-named metals, in a pure state, would be acted upon with the same facility that lead would. Experience has taught, that alloys were less acted upon than the separate metals ; but even these are sufficiently acted upon to prevent their safe adoption for the purposes now under consideration. Among the various articles of this class (alloys) which have been examined, that of copper, coated with pure tin, is least objectionable. Such it appears, are the views of Dr. Dana ; and in closing this subject, he makes the following recommendations :—

1st. Wood should be preferred wherever it can be used.

2d. Cast-iron or wrought-iron tubes.

3d. Copper, protected completely by pure tin.

The use (says he) of all other metals, and alloys of these, in the present state of our knowledge and experience on these subjects, ought forthwith to be abandoned.

Such it appears is the assertion of a member of our profession who has devoted especial attention to the subject which has demanded and called forth a thorough and protracted examination, which has led to the adoption of opinions which will stand the test of time. For one we are exceedingly pleased that Dr. Dana, has entered into a consideration of this subject so fully, and we doubt not that the facts which his perseverance, skill, and industry, have furnished, will, for a long time to come, be looked upon as conclusive on this subject, which will render his opinions second to none in this country. In Great Britain, the researches and writings of Prof. Christison on this same subject, have more than any one thing else contributed to the development of his present extensive, wide-spread and honorable reputation. A fact which of itself furnishes additional evidence of the importance which of necessity surrounds the subject. Such being the case it will not, we sincerely hope, be deemed profuse praise when we say that we look upon the evidence furnished in the appendix as the most valuable contribution to public hygiene which has for a long time been presented to our consideration, and ranks its author among the first original observers of which our own country at the present time furnishes. To his portion of the work may, with equal propriety, be applied with very slight alteration the opinion given in the notice of the original work of M. Tanquerel, viz: "It contains the results of long and careful observation and experiment, by one who possessed opportunities which fall to the lot of but few. The author states what he has himself witnessed; he has collected and arranged a multitude of facts, and drawn his conclusions from them. He gives an account of diseases, their history, symptoms, the mode in which they were contracted, &c. The work is one the interest and utility of which are not confined to the medical profession alone. It is one from which all who have any thing to do with lead, may learn something. Even as a matter of enlightened curiosity, the information which it conveys is worth having; but this is trifling compared with its subservience to the cause of humanity." (*Forry.*)

The typographical execution of the work is excellent, the paper good and we hesitate not to recommend it to our readers as the most complete and valuable treatise within the reach of the purely American or English reader.

ART. VIII.—*Observations on Surgical Diseases of the Head and Neck.* Selected from the Memoirs of the Royal Academy of Surgery of France. Translated and Edited by DREWRY OTTLEY.—London: Printed for the Sydenham Society, 1848. 8vo., pp. 293.

THE works already published by the Sydenham Society need no commendation from our pen, as their intrinsic value has long since been acknowledged by the profession. The great merit of the work before us will, we have no doubt, be found in the purely practical character of the individual essays which make up the volume,—composed as it is of an (we had almost said) innumerable number of facts, carefully collected and analyzed by such men as Quesnay, Lassus, Louis, Ferrand, Bordenave, Martiniere, and Malle. The subjects treated of comprise some of the most important in surgical science; and the essays, we regret to say, are accessible to but few American surgeons. Owing to these circumstances we have thought best to give the volume before us as extended and minute an analysis as the limits of our Journal will permit.

From the preface of the translator and editor, we learn that from the organization of the Royal Academy of Surgery in 1731, to the commencement of the French revolution in 1798, five quarto volumes of the Transactions were published, comprising essays on almost every department of surgical science, many of which upon examination were found to be more theoretical than practical; and some had become too entirely obsolete to be worth translation. The council of the Society therefore, decided upon giving a selection of some of the most important and practical papers. And in order to give the volume a definite character, it was determined to confine the selection "to those memoirs in which diseases and injuries about the head and neck are treated of." A sub-committee of the council was appointed to examine the memoirs more fully. Those included in the present volume, are the papers selected and approved of by the sub-committee and council.

The first 41 pages comprise an essay by M. Quesnay, entitled "*Summary of Observations on the Use of the Trepan in Doubtful Cases; in which an attempt is made to determine the reasons by which the Surgeon should be guided in deciding to employ or abstain from this Operation;*" with "*Remarks on the Use to be made of Observations.*" This paper commences with the remark, that "among the various signs which may determine a surgeon to employ the trepan, none is considered more clearly to indicate it than fracture of the scull, accompanied with depression or displacement of the bones, or fragments of bone, wounding the brain or its membranes; and still more so, if the opening caused by the fracture do not afford sufficient room for their removal." Under such circumstances," says M. Quesnay, "surgeons have considered the use of the trepan indispensable." To these conclusions observation frequently appears opposed. And the author proceeds to determine, in as clear a manner as possible, the value of cases bearing upon these doubtful points.*

Observation 1. is the report of a case by M. Avellan.

A girl, aged fourteen, received a blow upon the head, which produced depression of the right parietal bone, followed by stupor, efforts to vomit, and delirium. The trepan was indicated, but the mother of the girl absolutely refused to permit it. "The stupor and delirium lasted three months, which kept the patient in a state of imbecility." Gradually the depression became less, the bone returned to its level, and the symptoms entirely disappeared.

Obs. 2d.—M. Duprez attended a child aged 10 years, who fell from a height and struck upon the top of the head. Two tumors formed, one over the frontal and the left parietal, the other over the right parietal bone. They were opened, when it was found that there existed fracture and depression, with effusion of blood on the dura-mater. The trepan was decided upon, but the operation was delayed and finally became unnecessary. Separation of the coronal suture took place, through which the blood passed off and the symptoms disappeared. On the fiftieth day exfoliation of the external table of the left parietal bone took place; the wound soon after healed kindly.

The foregoing cases show that the use of the trepan is not indispensable, although there is but little doubt that the recovery in each was protracted and rendered dangerous by not resorting to its use.

---

* This and the following cases have been somewhat condensed; great care has been taken, however, to preserve all the facts of the cases in their native force and integrity.

Obs. 3.—M. de la Peyronie was called to attend, in consultation, a patient, aged 80, who, thirty-five days before, had been struck on the centre of the parietal bone by a door which made a wound which laid bare the scull. He found a sinus which he dilated and thus discovered a fissure of the scull. There had not been, nor was there at that time any symptoms which would lead to a suspicion that extravasation existed. It was thought best not to trepan, but wait for exfoliation. At the end of three months a portion of both tables separated as large as a twenty-four sous-piece, removing the fracture and leaving the dura-mater bare.

"This case," remarks M. Quesnay, "shows that injury of the scull may render the use of the trepan necessary, even where there is no depression or extravasation." The following case also confirms this fact.

Obs. 4.—A man received a blow upon the head which caused no wound or apparent contusion. Severe symptoms, however, followed. An incision was made over the point where the blow was received, but no fracture was found. An antiphlogistic treatment was pursued. This mitigated the symptoms in a measure, but soon after convulsions set in, followed by depression, and the man died three months after the reception of the injury. After death a fracture at the base of the scull, without effusion, was found, "commencing in front of the mastoid apophysis and extending through the petrous portion of the temporal bone and the sella turcica." A separation of a line in width existed.

It was believed that death resulted in this case from the non-union of the fracture, and had it occurred in a situation where the trepan could have been used, this and the previous case would "seem to favor the opinion that as a general rule we should apply the trepan wherever there is a fracture." To the adoption of this apparently justifiable conclusion he objects, and says, "we are convinced by a number of facts, ancient and modern, that many fractures and depressions are cured without the use of this instrument, and such examples have for a long time led some surgeons to believe that more fractures would be cured without the trepan than with it."

The symptoms, remarks M. Quesnay, furnish no more certain guide; for the immediate symptoms are unimportant or there may be none, even in cases of fracture accompanied by effusion or injury of the membranes or brain; and if delay is determined upon, consecutive symptoms may arise, and the result of the case prove that the warning came too late for the trepan to be of any service. "It is, therefore, only in cases where we have nothing but the symptoms to depend on, that we ought from them to decide on the employment of the trepan, and for this very reason, that there being no apparent lesion of the scull, we have nothing else to guide us; but when there is a fracture or depression, we ought not to depend on symptoms or wait for them, because we have already sufficient data and less dangerous ones than those consecutive symptoms which surgeons would have us look to." The following case illustrates the fact that there are cases where, if we act circumspectly, the trepan may be dispensed with.

Obs. 5.—A child, aged 5, fell from a height and fractured both parietal bones. M. Gallait was called and found beside the fractures a tumor below each. It was laid open and the extravasated blood evacuated, when it was found that the bones were elevated, but could be depressed by the fingers. There were no urgent symptoms and Mr. Gallait was led to postpone the operation of trepanning. He was governed in this decision by the fact that there existed a separation between the fractured parts which might allow the egress of any portion of extravasated matter. A compress was put on and confined by a bandage. At the end of three weeks the child was perfectly well.

This case shows that the operation may be dispensed with when there is a separation of the fracture sufficient to admit of the flow of extravasated blood; this, however, only applies to cases where the effused fluid is external to the dura-mater; and not when the extravasation is beneath the membrane. The separation of the fracture may not be sufficient to allow us to discover this latter condition, and death may result from its presence; a case is given in illustration of this fact.

When there exists fracture of both parietal bones accompanied, by depression, &c., and there is a separation of the bones of only one side, the surgeon should apply the trepan on the side where there is no separation, as the following case illustrates.

Obs. 7.—A patient was seen by M. Mouton lying insensible and apparently dying. On examining his head an elevation over the whole length of the sagittal suture existed. On laying it open a separation of the suture was found, through which extravasated blood flowed. On the following day delirium came on, and the trepan was resorted to on each side of the suture. Under the right parietal bone was found a large quantity of extravasated blood which was removed. On the left side it had escaped previous to the operation. The threatening symptoms immediately ceased and the patient recovered.

M. Marchetti speaks of a similar case in Obs. 15th. These cases led M. Quesnay to believe that independent of symptoms we ought to be very attentive of the possibility of such circumstances.

That the surgeon can in most cases decide on the course to be pursued in cases of fracture, depression, or contusion of the scull, there can be but little doubt, but there are cases where the most able are embarrassed, and these are cases of blows on the head, without evident lesions of the bones, or apparent contusion of the soft parts, which may sooner or later give rise to severe symptoms. The adherence of the pericranium has been considered by some as a certain evidence of the absence of fracture, and vice versa when there is a separation of this membrane, there is a fracture or contusion of the bones which require the trepan. Some have decided on its use by conjectures founded upon the supposed force of the blow, some wait for severe symptoms before they operate, while others combat them by frequent bleedings, &c. M. Quesnay remarks, that he "shall endeavor to discover in these very instances of success the circumstances, or peculiarities, which may assist us to distinguish the cases in which we can attain most certainty as to the course to be followed."

Obs. 8.—A man fell from a height and struck upon his head with such violence that the right eye started from its socket and hung upon his cheek. He lost his senses and soon became lethargic. M. Gallait found a contusion over the right parietal bone. The pericranium was not separat d from the scull, and this led him to conjecture that there existed no fracture. The stupor was referred to concussion of the brain. The patient was bled fifteen times in forty-eight hours. The patient became sensible on the ninth day, and at the end of a month was well.

The frequent occurrence of cases like the foregoing led M. Petit to remark, that when stupor and insensibility came on immediately after the injury, that they were owing to concussion, but if they appeared some time after its receipt, then they indicated effusion. There are cases where insensibility and stupor may be produced by concussion, and no effusion come on afterwards. Here, again, the surgeon may be in great doubt, as the following case illustrates.

Obs. 9.—A man, aged 25, fell from a height and struck upon his head, producing a small wound on the left side of the frontal bone. He immediately became insensible. M. Boudon found him in a lethargic stupor, and on making an incision found the pericranium separated from the scull but no fracture. The patient was bled six times in three days. On the third day no amendment, clysters were administered, and he was bled from the foot; two emetics; an ounce of tobacco in an injection was given. The symptoms continued until the eighth day when sensibility and partial consciousness returned. On the evening of the same day he relapsed back into his former state, which gave strong suspicions of effusion. The trepan was strongly indicated, but still was not resorted to. The same line of treatment was persevered in, and on the eighteenth day cosciousness returned and the patient recovered; there remaining slight deafness and entire loss of memory for some time afterwards.

In his remarks on this case, M. Quesnay says, in cases like the foregoing "success is not sufficiently common, and the indications for the trepan is too well founded to allow our abstaining from its use, unless there are some particular reasons which may decide us to adopt another course; this is the safest practice, the most approved, and the best established by experience."

Obs. 11.—A lad, aged 12, received a kick from a horse which drove in both tables of a portion of the frontal bone, just above the frontal sinus. M. Pineau found him, immediately after, insensible and passing his urine and fæces involuntarily. He was bled, but owing to the interference of a quack, the parents would not allow the trepan to be applied. M. Pineau saw him at the end of eight days, and the operation was performed. A pint of blood flowed from the opening made. Half an hour afterward the patient recovered his senses. On the seventh day after the operation he ate imprudently and there soon after followed fever and pain in the right hypochondrium. He was bled twice, and every third day a purge administered. At the end of three months the cure was perfect.

Obs. 12—M. de Garengeol was called on to open the body of a woman who had received a blow with a fist over the temporal muscle. Stupor immediately followed, and the patient lived ten days in that state. On examination no fracture existed, but beneath the scull and on the dura-mater a large quantity of extravasated blood was found.

M. Quesnay says, that in M. Pineau's case the fracture afforded a complete indication for the use of the trepan; "for the insensibility which occurred at the instant of the blow, and which continued unchanged, would not without the fracture have afforded a sufficient indication for that operation; for though there are many instances of such a loss of sense being attended by extravasation, the great majority of cases prove that it is almost always due to concussion, and we may here observe, that this cause sometimes gives rise to very serious symptoms along with the insensibility, for the relief of which the trepan would be useless.

Obs. 13.—A woman aged about 40, fell backwards in going up stairs. M. Manteville found her pulseless and senseless; she soon vomited blood; there was a little redness at the posterior and inferior part of the right parietal bone. She was bled seven times during the first four days. On the fifth the insensibility continued, the patient tossed and moaned; the following day convulsions set in—the bleeding was repeated, and an incision made over the injured part; the pericranium was found adherent to the scull, and there existed no fracture—one hundred and sixty ounces of blood in the course of nine days were taken; sensibility was gradually restored, but two years elapsed before complete recovery took place.

" Although the severe symptoms supervening, in the foregoing case, on the loss of sensation which had immediately followed the accident yielded without the trepan, we are not of the opinion, setting aside for a moment the conclusion to be drawn from the adhesion of the pericranium, that this course should be followed in a similar case. On the contrary, we think such an increase in the symptoms denotes a corresponding increase in the cause, and that that increased cause is almost always an effusion under the scull or in the brain—the former the most frequent." M. Quesnay inclines to the opinion that the attachment or detachment of the pericranium furnishes no proof against the latter or in favor of the existence of extravasation, although many of the previous observations may appear to favor the idea. He then goes on to relate cases illustrating this point more fully. After which he describes a form of contusion of the scalp, attended with extravasation of blood under the pericranium, which is strongly calculated to deceive the young surgeon into the belief that fracture with depression exists. In such cases, the circumference of the tumor is firm and elevated, the centre soft and easily depressed, giving rise to the suspicion of depression; it occurs most frequently in young subjects, and is dependant upon effusion of blood under the pericranium.

Obs. 19.—A soldier received a blow from a stone, from which he fell to the ground in a state of insensibility—it soon passed off, two contused wounds over the parietal bone, but no other injuries, were observed. On the fourth day he had fever, and complained of pain in his limbs; the parts were re-examined, but no appearance of external injury was found; bleeding was again resorted to, the patient's right leg and arm became paralyzed, delirium with rigors came on, and the man died on the eleventh day. On inspection there were found a fracture of the inner table of the scull beneath the point where the blow was received, a teaspoonful of pus on the dura-mater, and an abscess beneath it.

This case furnishes an example of what has been, and still is termed, *contre-coup;* such cases are occasionally seen, and require the best skill of the surgeon to distinguish them. By some surgeons they are believed to be produced by a double blow received by the patient. The possibility of their occurrence "should render us attentive to these sort of fractures, whether they result from *contre-coup* or from a double blow." "The occurrence of symptoms some time after the wound, as detailed in the foregoing observations, is always sufficient to justify us in deciding to trepan." Secondary symptoms may be produced by the formation or presence of pus upon or under the dura-mater, as the following observation shows:

Obs. 23.—A young man received a blow from a stick on one of the parietals, which was followed by symptoms of extravasation. M. Mouschal proposed the trepan, but the council which was called objected, on the ground that the symptoms were not sufficiently severe to require it. The patient recovered his senses soon after the injury. On the sixteenth day, had fever and a rigor—the trepan was resorted to, and a large quantity of pus escaped, and the patient soon recovered.

It is evident from all these observations, that in injuries of the head, the "symptoms are our only data on which our decision rests as to the use of the trepan." Some of these cases also show that the abstraction of blood must be frequent and large in order to prevent extravasation. Also that no dependence can be placed upon the state of the pericranium as an indication. These observations further show that insensibility produced at the moment of the blow, accompanied by fracture, should not lead us to adopt its use, but that a close watch should be kept for the after-symptoms which may present themselves, indicating effusion, "for in such cases the symptoms which the effusion will not fail after a time to cause, are our only guide."

A different value, remarks M. Quesnay, should be attached to the absence of symptoms in cases of injuries caused by fire-arms, all great practitioners believing in the necessity of the use of the trepan in these cases. Two cases are related, bearing upon this point. We select the following:

Obs. 25.—A lieutenant was wounded by a spent ball, a little above the right frontal sinus. The patient was stunned for a moment, which was completely removed by bleeding, after which the patient appeared perfectly well. At the end of three weeks he fell into a lethargic stupor. A council was called, and the trepan was used, which gave vent to a large quantity of pus collected under the scull. The operation proved useless, as it was performed too late.

In these two cases, remarks our author, conjectures as to the force of the blow could avail nothing.

Following the relation of these cases and remarks, are some excellent observations on the best mode of treatment of cases, where severe pain is suffered in the part wounded for a long time after the main symptoms of the case have subsided, and the wound has healed. In such cases he has known recovery to take place after spontaneous exfoliation of the part injured.

In his "*Remarks on the Use to be made of Observations*," he says, "that the contradictions to be found in many of the observations we have related, may serve to show how dangerous it is to be guided in practice by the observations of others, when each particular observation is considered as a model, when successful cases only are looked at, and when we have undue respect for the opinions of the master who have related them." He then goes on to analyze the contradictions of each case which the careful reader will have already seen; he declaims against the practice too frequently pursued of drawing conclusions from isolated cases. Nature should speak to us in her own language and we should only attempt to interpret it when aided by the combined light of large practical experience and sound theory.

The 2d memoir in the volume before us is also by M. Quesnay, entitled *Remarks on Wounds of the Brain, in which it is proved by numerous observations, that the brain is susceptible of various operations which may frequently save the life of the patient, and in which an inquiry is instituted respecting the remedies best adapted to the treatment of wounds of that organ.*

The ancients believed that any injury of this important organ was certain death, but observations long since have shown that wounds of the "cortical and medullary substance heal almost as readily as wounds of most other viscera." In illustration of this remark M. Quesnay, in this paper gives the particulars of a number of cases where recovery took place after severe wounds of this organ. "The knowledge of these facts, he remarks, is in one point of view particularly important to surgeons; for not only the cases we have related, but many other similar ones which are to be found on record, should encourage us to treat wounds of the substance of the brain, however considerable they may be, with all possible attention." The cases related also serve to show, that in certain desperate cases we may attempt operations, which the circumstances or symptoms of the case indicate, such for instance as opening of abscesses, removal of tumors, of foreign bodies, or portion of the brain itself, &c. The propriety of which is confirmed by a number of cases given in the memoir.

The 3d paper is a "*Memoir on Wounds of the Superior Longitudinal Sinus.* By M. Lossus. This paper contains the details of a number of experiments made upon animals, which the author performed to settle in his own mind, the propriety or impropriety, as the case might be, of performing operations over an opening into this sinus. It was the general belief, previous to his time. that a wound of the longitudinal sinus would give rise to fatal hemorrhage. The experiments detailed, and the cases cited in this memoir, prove that "an opening of this sinus cannot produce a hemorrhage which would require any extraordinary measure," and that even a part of the sagittal suture may be removed by the trepan, should the surgeon deem it desirable for convenience of position, to operate at this point. The following case is one of no ordinary interest.

Case 2.—A boy, aged 8, received a blow with a stick on the head from his tutor; he was giddy for a few moments. Some time after, a tumor about the size of a walnut appeared; it was indolent, and appeared to contain fluid. M. Lassus divided it with a knife, venous blood flowed, its flow continued, and upon examination it was found that fracture of the sagittal suture existed, a portion being forced through into the sinus. A council being called, after a good deal of delay and opposition, a portion of the cranium each side was removed, (it not being possible to remove the piece which was lodged in the sinus without,) after which, by means of the forceps it was extracted, a flux of blood followed, a dossil of dry lint being held upon it for a few minutes caused it to close, and the patient entirely recovered.

There can be but little doubt, that "surgeons have often been deterred from undertaking a beneficial operation, which a knowledge of the experiments and cases detailed in this paper, are well calculated to dissipate. M. Lossus closes this memoir by saying, "that the object of this paper is to endeavor to banish the fears that have been erroneously entertained respecting the danger of wounds of the sinuses of the dura-mater, and to show the advantages to be derived from trepanning over the sutures in cases of necessity." We have long since been of the opinion, that the only valid objection to the operation over sinuses, to the careful surgeon, is the firm adherence of the dura-mater to the cranium at this point.

The next memoir, is an "*Examination of the doctrine of Ancient and Modern Authors, respecting the application of the Trepan on the sutures of the scull.*" By M. Louis.

This is an excellent resumé of ancient and modern writers, and one which is exceedingly valuable (if for nothing else,) for the bibliographical literature it contains. Its character prevents us from giving an analysis of it. It closes with the following sensible remarks, which we cannot refrain from copying. "We have seen, in the above account of the opinions of different authors, how inattentively their works are read; their doctrine is often misunderstood, and under their names, errors are transmitted in books subsequently published. The truly respectable authority of the real masters of an art, greatly suffers by these changes. Better servilely copy them, than place in their mouths, by erroneous extracts, opinions they never held. In order to distinguish between the true and false, and to attain correct principles, we must go back to the sources of knowledge, re-discuss matters laid aside, distinguish species, appreciate experience and guard ourselves from being dazzled by success, note the favorable circumstances which have led to it, and combat errors which prejudice sustains and unwillingly abandons."

M. Louis is decidedly in favor of the conclusions and opinions of M. Lossus, as given in the previous paper.

The fifth article is a "*Memoir on Fungous Tumors of the Dura-Mater*," by M. Louis. The particulars in part of twenty cases of this disease are related in the paper. So closely allied are they in many respects, that the following, which we quote, may be considered a sample of the rest.

A man, aged 35, possessing an excellent constitution, whilst descending some steps, fell heavily and struck upon his buttocks, which received the full force of the blow, he felt stunned for a few moments, the same sensation continuing more or less for four months—eight months after the accident his barber called his attention to a singular sensation accompanied by a crackling sound, near the top and to the right side of the head. On the following day a small tumor appeared at the point, it caused no pain, but increased rapidly; he consulted several surgeons, some were of the opinion that it was an aneurism, others cerebral hernia. Various means were resorted to for relief, but with no success—pressure produced giddiness. His constitution gradually failed, and he died 22 years after the reception of the injury. M. Louis made the autopsy. The tumor was found to arise from the dura-mater. A complete perforation of the cranium from the pressure of the tumor had taken place—the internal surface of the dura-mater was much thickened, and its vessels had acquired a varicose appearance; the tumor had no attachment to other parts, and in construction was much like that of ordinary sarcoma.

In some of the cases mentioned, two or more tumors were present, which rendered the treatment more complicated, and the danger greater. M. Louis remarks, that " surgical aid can only be rendered with some hopes of success in cases where the tumor is single, circumscribed, and when the nature of the surrounding parts permits of its being attacked over its whole circumference." He believes that the fungus is essentially a disease of the dura-mater, and that the affection of the bone is consecutive; that this latter part is the one to which treatment should be directed, by the immediate removal of the diseased bone that surrounds the tumor. To use his own words, " it is only after we have removed the bony circumference which conceals the whole of the tumor, that we should employ means to destroy sarcomatous vegetations of the dura-mater by the use of a ligature, of aromatic powders, or even of appropriate escharotics, according to the nature of the case." As to the correctness of this line of treatment we leave our readers to judge for themselves; cases are related in the paper favoring the practice.

A short but interesting " *Memoir on Encephalocele, or Hernia of the Brain*," by M. Ferrand, follows this; after which comes a " *Summary of Observations on the Diseases of the Maxillary Sinus*," by M. Bordenave. This article commences with a short anatomical description of the sinus; after which he cautions the surgeon against mistaking a fistulous opening through the socket of the molar tooth discharging mucus for that of abscess, which has frequently been done. Pus contained in this sinus is not uncommon, being produced by inflammation of its lining membrane, or caries of the alveolar sockets. A number of observations are cited in illustration of this fact. When pus is confined with the sinus for a long time, caries of the maxillary bone may result. In cases of simple abscess of the sinus, the extraction of the second molar tooth, and if necessary, perforation through the socket, may be resorted to, after which simple injections may be used if necessary. Diseases of the sinus produced by a specific poison, receives from him a very extended notice. Syphilitic caries of the maxillary bone and sinus is freely discussed. " *A Supplement*" to this article is furnished by M. Louis, in which he endeavors to enforce the doctrine and precepts of Bordenave. There is a " *Continuation of a Memoir on Diseases of the Maxillary Sinus*," by M. Bordenave, following this, occupying 26 pages, and devoted to the consideration of different forms of tumors which occur in this sinus, which from its intrinsic merit we cannot pass by without noticing.

It is well known that the mucous membrane of the maxillary sinus, like that of the nostrils, not unfrequently gives rise to tumors, or fungous excrescences, which baffle the skill of the most able surgeons —insidious in their rise and progress, they frequently become formidable before they are brought to the surgeon's notice. The operations required by the presence of tumors in this part, are among the most creditable in surgery, and not unfrequently call for the most ingenious tact of the surgeon.

In this paper a large number of cases are related; some of a slight, others of an aggravated character. In the former, the course to be pursued, after satisfying ourselves of the presence of the tumor, and without waiting for its farther growth, is "to make an opening into the maxillary sinus, either through its outer wall, or by enlarging any existing opening through the alveoli, proceed at once to extract the polypi, or to excite suppuration in the cavity by the use of digestive remedies, or escharotics of various strengths, or by the application of the actual cautery." When the tumor is single, and the disease is confined to the mucous membrane, this treatment will frequently prove successful. The disease, however, is not always so limited; there are complicated cases in which these fungous tumors seem to generate others; in such cases we can only hope for success by attacking the whole disease directly. By directing our views to this end, our efforts will often be efficacious; and we may sometimes obtain astonishing cures, almost beyond our hopes. Our space will not permit us to quote cases illustrative of the success of the treatment he proposes. But we pass on to section 2d of the memoir, which treats of exostosis of the bones forming the sinus. The frequent elevation or enlargement of the maxillary bone from the presence of tumors in the sinus, renders the diagnosis of exostosis here difficult. M. Bordenave recognises the different forms of exostoses, and after speaking of the specific form requiring the administration of mercury, he says "If the exostoses resist these remedies while the general health of the patient remains good, or if it depend simply on a local disease, we may then attack it with some of the various means of cure with which surgery furnishes us." These are the use of the trepan, the chisel, and saw, and the actual cautery.

Obs. 11th.—A man, aged 33, had for a long time a tumor in the region of the maxillary sinus, which depressed the palatine bones so as to impede the actions of the tongue, whilst in other directions it forced upwards the floor of the orbit, in front it had pushed out the maxillary and molar bones, beyond the level of the nose, whilst behind, it extended to the posterior fauces. M. David laid the anterior coverings of the tumor bare, and sawed off the projecting part, which constituted a portion of a sphere of about three inches in diameter; on removing this he found the tumor to consist internally of a hardish, spongy, white substance, in appearance much like agaric; by various modes of proceeding, M. David succeeded in removing the remaining portions of the tumor—portions of the floor of the orbit of the maxillary, molar, and palatine bones were removed. The actual cautery was applied to portions of the disease that had escaped the cutting instruments. The portions removed left a cavity, the dimensions of which, from before backwards, was four inches and a quarter, and from above downwards, and from right to left, three inches. On the sixtieth day the deformity had so far disappeared that there remained only a small cavity at the anterior part. The patient entirely recovered. The operation was performed on the 27th of June, 1770.

This and the preceding observations, remarks M. Bordenave, furnish examples of true exostosis of the sinus which we ought to distinguish from the various affections which seem to distend the bone, and which may be mistaken for that disease. Periostitis is liable to form, on the surface of the bone, compact growths which may be taken for exostosis. The origin and nature and progress of this disease, along with the smaller amount of resistance in the tumor will serve to distinguish it from exostosis.

Section 3d, treats of wounds of the maxillary sinus with fracture of the bones.

These should be considered as complicated wounds and treated accordingly. They frequently give rise to trouble from the constant flow of mucus through the wound, causing a fistula.

Obs. 13th.—I saw, (says M. Bordenave,) at the Charity Hospital in Paris, a man who had a fistulous tumor in the right cheek, from which protruded the point of a nail, which had been fired from a gun, and passed head foremost into the sinus. M. Foubert divided the tumor down to the maxillary fossa, loosened and extracted the nail. The patient was placed upon the opposite side, which allowed the fluid to flow through the nostril, the part was dressed ; a number of small pieces of bone exfoliated, after which the cure became perfect.

Those who consider the actual cautery the severest remedy in preventing the return (after removal) of tumors in this sinus, will find in their observations, many positive facts to support these opinions. This memoir closes by the narration of an interesting case of fungous tumor of the sinus, by M. Garengeol ; which was eventually cured after repeated extractions by the use of the actual cautery.

Following this is a memoir also by M. Bordenave, "*On certain Exostoses of the Lower Jaw,*" which we pass by in order to have more space for the notice of a "*Memoir on Bronchotomy,* " by M. Louis, and a continuation of the same, "*Which treats of the existence of Foreign Bodies in the Trachea.*" The first of the memoirs is a lengthy resumé of the literature of this operation, in which the opinions of different authors are discussed with great ability. The different instruments used by surgeons, ancient and modern, are fully described, and it closes by some judicious directions calculated to enforce upon the mind of the surgeon the kind of cases in which the operation is justifiable.

The first part of the second memoir is occupied with the detail of several cases where death occurred from suffocation within a few days after the substance passed into the trachea: after which a number of cases are given, where the foreign substance was spontaneously discharged, and the paper closes by the relation of several cases where a successful termination was brought about by the early performance of tracheotomy, and thereby the removal of the foreign body. M. Louis is an advocate for the early performance of the operation, free incisions which will admit, if necessary, the introduction of the finger in order to search for the substance.

"*A case of Perforation of the Trachea by a Foreign Body,*" by M. De La Martinier, claims a passing notice for its singular and unique character.

Case.—The son of a merchant, whilst cracking a whip, was suddenly seized with great difficulty of breathing, followed by extreme danger of suffocation. A surgeon was called and an internal as well as external examination of the throat was made, but nothing that could give rise to it was discovered. M. Martinier saw the patient in convulsions with swelled or turgid face, shortly afterwards, when, upon close inspection, a small red point was observed just below the cricoid cartilage, and deep under it could be felt a small circumscribed tumor. An incision was made down upon it, a small hard point was felt by the finger; it was seized with the forceps and withdrawn. It was found to be a large brass pin, more than fifteen lines in length, which had passed directly through the trachea. The pin was attached to the end of the whip-lash. The patient shortly afterwards recovered.

In cases where symptoms like those which existed in the foregoing case are present in an aggravated degree, remarks M. De La Martinier, "the operation of bronchotomy will remove the immediate effect, namely, impeding suffocation; the life of the patient being thus preserved, we shall have time afforded us to direct the necessary researches for removing the cause by surgical means, or for waiting without fear the efforts of nature."

A "*Summary of Cases of Swelling of the Tongue, and the most effectual means for relieving it*, by M. De La Malle," closes the volume before us. The remedy recommended is free incisions made into the dorsum of the tongue; a therapeutic surgical measure, the originality of which the author claims for his father who resorted to its use as early as 1725, upwards of 70 years, by-the-by, after it had been put in successful practice by the celebrated Dutch Surgeon, Job A. Meekren.

The reader of this analysis should bear in mind that the memoirs which compose this volume, are now for the first time presented to the profession in an English dress; the original having been upwards of fifty years since published to the French profession. In them will be found views which have long since become standard precepts in the practice of surgery; others, the adoption of which has long been a matter of question among surgeons; and others still which are being at the present time brought before the profession as peculiar to the last quarter of a century. The present is an age of eras in medical science; and if we mistake not, in many of the old masters may be found precepts and modes of practice, the adoption of which would add much to the success and efficiency of modern surgery.

BIBLIOGRAPHICAL NOTICES.

Art. IX.—*A Dispensatory, or Commentary on the Pharmacopœias of Great Britain and the United States, comprising the Natural History, Description, Chemistry, Pharmacy, Action, Uses and Doses of the Articles of the Materia Medica.* By Robert Christison, M. D., V. P. R. S. E., President of the Royal College of Physicians of Edinburgh, Prof. of Materia Medica in the University of Edinburgh, &c. Second edition, revised and improved, with a supplement, containing the most important new remedies. With copious additions, and 213 illustrations. By R. Eglesfeld Griffith, M. D., author of "A Medical Botany," &c., &c. Philadelphia: Lea & Blanchard. 1848.

The first edition of Christison's Dispensatory, has been long before the public, and wherever it has been known has fulfilled all the expectations raised by the standing of its author as an able chemist and a sound and discriminating physician. It is a matter of surprise that it has never before been republished on this side of the Atlantic, and we are glad that Messrs. Lea & Blanchard have so soon availed themselves of the opportunity afforded by a second Edinburgh edition to furnish us with an American reprint of this standard book. The first four pages of the work are occupied by an introductory chapter on some of the processes of pharmacy; a chapter which may be thought to be intended for the apothecary rather than for the physician, but which contains matters with which the physician should be more familiar than he commonly is, influencing as they do, the activity of his remedies. Like every other part of the book, it shows that Dr. Christison is not a mere compiler, but has drawn largely upon his own observation. The following is curious, and worthy of further inquiry.

> There is reason to suspect that the officinal pills are in general too large. Five grain pills often pass through the body apparently but little altered; and it has occurred to me to observe that four colocynth and henbane pills of one grain each will operate as effectually as two five grain pills, and more mildly.

The introduction of Dr. Christison is followed by various extracts from Redwood's late edition of Gray's Supplement to the Pharmacopœia, made by the American editor, on the specific gravities of bodies, and the various instruments by which they are determined, thermometrical equivalents, solubility of salts, &c. The body of the work is taken up with the materia medica; and in it the articles are treated of in an alphabetical order. The style is characterized by directness, clearness, and conciseness. What the author has to say, he says shortly, but there is no mistaking his meaning. The chemical history of the various drugs is given with great fulness, and the various processes of the pharmacopœias submitted to a rigorous criticism. What adds greatly to the value of the work is the fact that for the therapeutical operation of medicines, Dr. C. refers us constantly to his own experience. He is an acute and discriminating observer, and has had ample opportunities for observation. He speaks then with an authority warranted by his position, and while giving due credit to others, relies on what he himself has seen. Sometimes we believe he is wrong, underrating perhaps, (as in the article on nitrate of potash,) a well-known and valuable remedy, but his opinions are entitled to such weight that every one must be desirous of knowing them.

Besides the articles mentioned in the Edinburgh Pharmacopœia a supplement of the most important new remedies which have come into use since the last edition of that Pharmacopœia, has been added. As might have been expected, Dr. Christison is not one to be carried away by a novelty merely because it is a novelty. He speaks of new remedies with becoming caution, yet is perfectly willing to allow all that can be fairly urged in their favor. The following extracts may be found interesting, containing matter not generally known to the profession.

Gallic acid has lately come into general use as an internal or constitutional astringent. It has been found serviceable in chronic mucous discharges from the bowels or urinary bladder. But its most remarkable effects as an astringent have been manifested in hemorrhages, especially from the kidneys, the uterus and the lungs. I have seen several cases of menorrhagia promptly recover under its use. I have likewise seen hæmaturia repeatedly yield to it. And in two cases of hæmoptysis the hemorrhage rapidly ceased after the third dose of six grains given every hour. Mr. Lyell, of Newburgh, not long ago, turned my attention to its apparent power of arresting the excretion of albumen with the urine in Bright's Disease of the Kidney; and in a few instances it has appeared to me to have this effect.

The usual dose is three grains thrice a-day, in the form of a pill, made with liquorice-root powder and conserve of red-rose. In urgent cases of hæmoptysis I have given 36 grains in twelve hours.

Of cod-liver oil Dr. C. thinks favorably.

This remedy was first used empirically, and no valid explanation of its virtues has been yet given. It is apt to cause sickness at first with some people, and a few are also liable to suffer diarrhœa. But in general it produces neither of these effects. It acts as an alterative, improving the complexion, and tending remarkably to increase the deposition of fat in the cellular tissue. During this change, strumous ulcers and enlargement of the glands, strumous ophthalmia, pseudo-syphilis, as it presents itself in scrofulous constitutions, various chronic cutaneous diseases, and chronic rheumatism frequently disappear; chronic diseases of the joints are also sometimes benefitted; phthisis pulmonalis often undergoes mitigation, and even apparent cures have been reported. Gout, rachitis, caries, and tabes mesenterica, are also said to have yielded to it. Its efficacy in many of these obstinate diseases has been exaggerated by its admirers. But there is no doubt that it is occasionally serviceable, and especially in strumous affections of all sorts. It undergoes digestion; for when two, three, or even four ounces daily, are taken for months continuously, very little increase is observed, by analysis, in the oily ingredients of the excretions.

The usual dose is half an ounce twice a-day, which those who can bear a larger quantity, may increase to twice as much. But it is right to begin with small doses of a teaspoonful only, in order to lessen the risk of nausea and vomiting being produced, by mere prejudice and disgust. Those who have had most experience in its use, find that the best way to administer it, is to give it simply, and afterwards a little sugar and cinnamon powder to remove the after-taste; three or four drops of oil of anise, cinnamon, peppermint, or lemon, dissolved in an ounce of the oil, also correct the nauseous taste and tendency to cause sickness; but no form of emulsion is any improvement. (*Bennett.*)

Of medicinal naphtha, or as he terms it spiritus pyrolixicus, he says:

> Its actions have not yet been carefully investigated; but it seems to be narcotic, sedative, and calmative. It certainly possesses the property of allaying the cough and febrile excitement of phthisis pulmonalis; but general experience has not borne out the sanguine hopes entertained by Dr. Hastings of its efficacy as a remedy in that disease. I can amply confirm all that has been said of it as an anti-emetic remedy in cases of chronic vomiting; for in cases of this affection depending on both functional and organic disease, I have frequently seen the vomiting arrested or greatly mitigated by pyroxylic spirit. Even creasote has appeared to be scarcely so efficacious.
>
> The usual dose is five minims; and it is conveniently given with a drachm of compound tincture of cardamom made into an ounce mixture with water merely.
>
> According to the editor of the Pharmaceutic Journal, the naphtha of Dr. Hastings is not Pyroxylic spirit, but Pyro-acetic spirit, Acetone, or Hydrated Oxide of Mesityl of Kane ($C^6H^5O + Aq$). But all the so-called Medicinal naphtha of the Edinburgh shops, obtained from London, is Pyroxylic spirit; and this is the substance to which the preceding remarks on the uses of naphtha in diseases must be understood to apply.

The American editor, Dr. Griffith, besides the extracts from Redwood's edition of Gray's Supplement, has added an account of the various processes of the U. S. Pharmacopœia, together with an account of such articles as are recognised by that Pharmacopœia, but are not mentioned by Dr. Christison. His additions seem well and judiciously made; but the chief value of the book to the physician, as we have before intimated, depends upon its affording an exposition of the opinions of Dr. Christison himself. B. W. M'C.

ART. X.—*Medical Lexicon: A Dictionary of Medical Science;* Containing a concise explanation of the various subjects and terms; with the French and other Synonymes; Notices of Climate, and of celebrated Mineral Waters; Formula of various Officinal and Empirical Preparations, &c. By ROBLEY DUNGLISON, M. D., Professor of the Institutes of Medicine, &c., in Jefferson Medical College, Philadelphia. Seventh edition, carefully revised and greatly enlarged. Philadelphia: Lea & Blanchard. 1848. 8vo. pp. 912.

WE have here presented to our notice another (the seventh) edition of Dr. Dunglison's masterpiece of literary labor. We venture the assertion that no work with which he has ever been engaged, has cost him half the pains and labor as this, and on looking over its pages we are fully impressed with the belief "that the author has not suffered his exertions to flag in the preparation of the present edition" which is sufficiently manifested by the fact that he has added "*between six and seven thousand terms* which are not to be found in the previous editions." In order to admit of these additions the size of the page has not only been increased, but the number of pages is also greater by at least one hundred. The typographical execution does honor to the publishers, and we have no doubt they will find a far more speedy and rapid sale for this enlarged and improved edition than they were wont to find with any of the previous ones. We commend it to the profession as every way adapted to supply the wants of the student and also that of the general practitioner.

Art. XI.—*A Practical Treatise on Poisons; their Symptoms, Antidotes and Modes of Treatment.* By O. H. Costill, M.D. Philadelphia: Grigg, Elliot & Co. 1848. 16mo. pp. 160.

Were man constantly omnivorous in learning there would be no apology for little books. It is true that many a "voluminous author when reduced to his quintescence, would appear in a nut-shell," and such ought to be thus reduced, for it is a wicked expenditure of time, to traverse the round of his wandering thoughts to gather here and there a good idea—it is like searching for diamonds in their native sands, or for gold in its primitive bed—it partakes too much of an original investigation itself, for when a man ultimately finds a truth, he feels almost as though he were himself entitled to it by right of discovery; whereas a book on a scientific subject, and especially on the boundless one of *medicine*, ought to be a succinct narration of important facts and legitimate deductions, so that the mind can grasp them readily and retain them easily. We have ever had a very poor opinion of those "pocket books," "*companions*," "*epitomies*," or "abridgments," which do not contain *all the important things* on the subjects of which they treat. Their tendency is to make the reader superficial, to *abridge* his intellect and curtail his usefulness.

Of the work before us we have but little to say; itself a compend it hardly admits of an analysis. It lays no claim to originality save in design. It aims at practical utility, and this on the subject of which it treats is most praiseworthy. It will serve as a useful guide in cases of emergency in the treatment of poisoning, and as such we can commend it, but it cannot serve even as a semi-remembrancer of what is known on the subject, Toxicology. Indeed this has become so vast and complex in its medical and *juridical* relations as to be fully understood only by those who have made it a specialty.

The practitioner must, however, be acquainted with the symptoms and antidotes of poisons, in order to know how to pursue a proper plan of treatment in cases of emergency where life depends upon the action of the moment. But the juridical questions of poisoning, had better be referred to the practical toxicologist. The latter can consult all the elaborate works on the subject, while the former only will be benefited by a perusal of this brief treatise. We do not hesitate to recommend it as a convenient little store-house of useful knowledge to the general practitioner, who has but little leisure to push his inquiries into the penetralia of the subject. Its adaptation to the general wants of the profession, its convenience, and cheapness, will doubtless secure to it a good sale. D. C. E.

Art. XII.—*The Principles and Practice of Modern Surgery.* By Robert Druitt, Fellow of the Royal College of Surgeons. A new American, from the last and improved London edition. Edited by F. W. Sargent, M. D., author of "Minor Surgery," etc. Illustrated with one hundred and ninety-three wood engravings. Philadelphia: Lea & Blanchard, 1848. 8vo. pp. 576.

The last English edition, the fourth, of which this is a reprint, appeared in London in the summer of 1847. The work at that time received from the pen of its author, very extensive additions, among which may be noticed the subjects of inflammation, malignant disease, diseases of the bones and joints, aneurism, diseases of the spinal cord, fissured palate, diseased conditions of the urinary apparatus, and very extensive additions to the appendix of formulæ: besides these an entirely new chapter on the art of bandaging, and another on diseases of the ear.

In the preparation of the present American edition, the general arrangement of the author has been adhered to. The annotations of Dr. Flint, of Louisville, Ky., who edited the first edition, have all been retained, except where they were already embodied in the text by the author. Dr. Sargent, the present editor, it appears has, in a great measure, confined himself to adding such of the results of the skill and industry of American Surgeons as appeared to him most worthy of notice. A large number of wood-cuts have also been added, the artistical execution of which are generally good. The work of Dr. Druitt's is an excellent compend of the opinions and practice of the best surgeons of the present day, and reflects great credit upon its author, who, as he himself has stated, wrote it while he was yet a student. It will, we feel assured, still continue to receive the esteem and confidence of the profession.

Art. XIII.—*A System of Human Anatomy, General and Special.* By Erasmus Wilson, M. D., Lecturer on Anatomy, London. Fourth American, from the last London edition. Edited by Paul B. Goddard, M. M., M. D., Professor of Anatomy and Histology, in the Franklin Medical College of Philadelphia. With two hundred and fifty-one illustrations, by Gilbert. Philadelphia: Lea & Blanchard, 1848. 8vo. pp. 576.

It is scarcely a year since we called the attention of the profession to the third edition of this valuable work, and now, through the politeness of Messrs. Lea & Blanchard, we have presented to our notice this, the fourth edition. Surely, the profession are not, at least in this instance, backward in appreciating, in a proper manner, a work which demands the confidence and supplies the wants of students in medicine.

The present is a reprint, with additions from the fourth London edition, and in preparing that for the press, Dr. Wilson "has availed himself of the discoveries in anatomy, which have been made public since the appearance of the preceding one." The excellent reports of Dr. Paget, on the chief results obtained by the use of the Microscope in the study of anatomy and physiology, have been freely consulted. The editor in revising it for the American press, "has added some new matter and a large number of plates; among others an important series on the nerves. He has also re-written his introductory chapter on histology. The illustrations which accompany the portions of the work devoted to general anatomy, it appears, were drawn from the microscope with the camera lucida; by so doing, absolute correctness is secured. We hardly need add, that the work possesses additional claims upon the profession and especially upon students. The typographical execution of this edition is good.

Art. XIV.—*An Analytical Compendium of the Various Branches of Medical Science, for the Use and Examination of Students.* By John Neill, M. D., Demonstrator of Anatomy in the University of Pennsylvania, Lecturer on Anatomy in the Medical Institution of Philadelphia, etc., and Francis Gurney Smith, M. D., Lecturer on Physiology in the Philadelphia Association for Medical Instruction, Fellow of the College of Physicians, etc. Philadelphia: Lea & Blanchard. 1848. 12mo. pp. 908.

This work consists of a series of "hand books," or manuals on the different branches of medical science, viz.: anatomy, physiology, surgery, obstetrics, materia medica, and therapeutics, chemistry and the practice of medicine. The authors of it lay no claim to originality. "As an analytical compendium, its highest claim is to be considered a faithful digest of recorded facts and opinions. We ask for it nothing more; and to obtain this, we have freely used the standard text-books of the day, gleaning from them whatever seemed useful to our purpose, even in some instances to the use of language as well as ideas. And to them we own our indebtedness."

However much we may desire an increase of facilities for the prosecution of medical studies in this age of improvements, we question the utility of "manuals to assist the student in the prosecution of his labors." "The great progress of the medical sciences, and the increasing number and size of the standard text-books in the various departments of medicine and surgery," instead of "creating a necessity for compends or manuals," demand (if this increase be founded on the progressive improvements of medical science) a comparative increase in the length of the term of study. If the constant, labored, and we had almost said over-taxed condition of the medical press for the last quarter of a century, be a safe index of the increase of medical truths, facts, and discoveries, then certainly there exists a greater necessity for increase of time, diligence and industry on the part of the novice of the healing art. The old adage that "all is not gold that glitters," may with propriety be applied to many medical books thrown off from the steam-press of the present times. It ought not to be inferred from the fact that there is a constant multiplicity of books, that they of necessity do contain new principles and facts; or that they are demanded by the wants of the profession: for not unfrequently a passing perusal will shortly determine the fact that they possess but little claim upon our attention.

It is not pretended by the authors of the work before us that all the information necessary to the student or practitioner, is embodied in the limited space of its pages; but only so much of the elements of medical science as are compatible with its character as an analysis. Neither is it "offered as a substitute for the ordinary text-books, or to lessen the necessity of regular attendance on lectures, or close-office study." With these provisions before us, and kept constantly in view, we hesitate not to recommend the compendium of Drs. Neill and Smith to the attention of the profession. As a concise but necessarily limited digest of medical and surgical science, it will materially assist the student and practitioner in refreshing his knowledge on points previously acquired. but upon which they may have become in a measure, rusty—for this purpose, it is admirably adapted, and we believe will not only prove acceptable to the student of medicine, but also to the profession at large.

Art. XV.—*The Ohio Medical and Surgical Journal.* Edited by John Butterfield, M. D., Professor of the Practice of Medicine in the Starling Medical College. Vol. 1st, No. 1, for September, 1848. Columbus: J. H. Riley & Co. 1848. 8vo. pp. 106.

In our last number, we announced the receipt of a prospectus of a new journal to be published at Columbus, Ohio. The first number of the proposed journal is now lying before us; its pages are filled with choice and valuable matter. Five articles compose its original department. The first is one on lithotomy in the female, by Prof. Howard, of Starling College. The second is a short account of epidemic measles, as they appear in Willoughby, Lake Co., Ohio, by F. C. Gibbs, M. D. The third is a very interesting case of inflammation and sloughing of the rectum, by Prof. J. P. Judkins, of Starling College. The fourth is a detailed account of a case of strangulated hernia, which terminated in sloughing of the intestines. and the formation of an artificial anus, by Richard P. Catley, M. D. And the fifth a very lengthy and valuable paper on inflammation and its sequelæ, engorgement, ulceration, and induration of the os and cervix uteri in the unmarried, by F. E. Massey, M. D. The selections of American and foreign intelligence are good; and the editorial department is filled with interesting and pleasing matter, which, to say the least, shows that its editor is well adapted to the responsible position whereunto he has been called. Long may he be spared to add honor to the editorial corps.

Art. XVI.—*A Dictionary of Practical Medicine;* Comprising General Pathology, Nature and Treatment of Diseases, Morbid Structures, &c. By James Copland, M. D., F. R. S. Edited, with Additions, by Charles A. Lee, M. D. New-York: Harper & Brothers. 1848. 8vo. pp. 144.

This number contains the completion of the article on poisons, which by the way, is one of the most condensed and yet practical monographs on this subject extant. A very interesting article on pollution, its etiology, pathology and treatment. A short but practical article on the disorders incidental to pregnancy. And a short article on the diseases of the prostate gland. This number is necessarily more complete than any of the previous ones, from the fact that the author himself has, owing to its recent appearance, been able to bring it up to the present advanced state of medical science, which fact has rendered the labors of the American editor less arduous. We should, however, have been much pleased to see the American medical bibliography of the present number as complete as it has heretofore been; an addition to the previous numbers which has much increased its value as a work of reference to the American reader.

ART. XVII.—*The Principles and Practice of Medicine.* In a Series of Essays. By JOHN W. HOOD, M. D. Philadelphia: Thomas, Cowperthwaite & Co. 1848. 8vo. pp. 263.

WE have here presented for the consideration of the profession (and public ?) the principles and practice of medicine, condensed into the compass of 263 small octavo pages, large type and double leads. Verily this is an age of improvements! "An age in which science and the arts (perhaps quackery ?) is marching onward with gigantic strides." The following is a summary of the contents of the work of Dr. Hood: "*Anatomical Arrangement and Configuration of the Body,*" "*Chronic Diseases of the Viscera of the Abdomen,*" "*Strumous Habit,*" "*Fever,*" "*Displacement of the Womb,*" "*Asiatic Cholera,*" "MECHANICAL AGENTS," "*Reducible Hernia,*" "*Hemorrhoids, or Piles,*" "*Gout,*" "*The Tongue,*" "*Appendix.*" The author in publishing the volume wishes it understood that his "object is not for the purpose of adding to the list of authors, but from a conviction that some of the causes of our maladies have been overlooked, or have not received the attention which their importance demands; and that several well-known remedial agents have fallen into disuse, notwithstanding their value, and the rank they deserve in the catalogue of remedies." On the present occasion, however much we might feel inclined so to do, we have not time, neither will our space permit of an analysis, or even a notice of some of the singular and unique opinions of the author. Suffice it to say, that judging from the examination we have given the work, the principal object of the author in its publication, is the speedy introduction into public favor, of several (patented ?) instruments, the adaptation and use of which, he fully describes in this work under the head of "*Mechanical Agents.*"

Art. XVIII.—*Ancient Monuments of the Mississippi Valley.* By E. G. Squier, A. M., and E. H. Davis, M. D. Published for the Authors. New-York: Bartlett & Welford. Cincinnati: J. A. & U. P. James. 1848. 4to. pp. 306.

This work, which constitutes the first volume of the "Smithsonian Contributions to Knowledge," a short editorial notice of which we gave in the July number of the Journal, has been politely forwarded us by the authors. By the advertisement, we learn that "this is intended to form the first of a series of volumes consisting of original memoirs on different branches of knowledge, published at the expense and under the direction of the Smithsonian Institution. The publication of this series forms part of a general plan adopted for carrying into effect the benevolent intentions of James Smithson, Esq., of England.

In the work before us, is collected and presented to the world a vast accumulation of facts relating to American Archæology, all of which are interesting to the scientific public, and some of which are exceedingly so to the medical man, and particularly so to the scientific physician. The chapter on "*Crania from the Mounds*," we have read with pleasure and profit. From it we learn that the human remains found in the mounds are of different eras. Those that are superficial are to be ascribed to the Indian tribes found in occupation of the country at the period of its discovery, in the fifteenth cenury; they are seldom deposited more than three or four feet below the surface, and are generally perfect—not so with those of the real mound builders; they are found at the base of the mounds, and in such a state of decay as to render all attempts to restore the scull, or any part of the skeleton, hopeless. The crania, when not so much decomposed as to crumble to powder beneath the touch, are crushed and flattened by the falling in of the sepulchral chamber, and by the weight of the superincumbent earth. "The authors have opened a great number of mounds, penetrated to their inmost parts, torn out their contents, subjected them to the most patient and laborious examination." (*Hall.*) And notwithstanding all the labor and toil they have undergone, have only been able to obtain one scull incontestably belonging to an individual of that race." It was taken from a mound in the Scioto Valley; and according to Dr. Morton, is characteristic of the American race. We regret that our space will not allow at present of a more extended notice of this valuable work. It has cost the authors a great sacrifice of time and labor, but in making it, they have raised an enduring monument to their memories, which must last so long as science is cultivated. We earnestly recommend this "great work" to the favorable attention of the scientific public, feeling assured that such of the members of our own profession (and there are many such) as have an interest in the advancement of ethnological research, will here find a rare treasury of new information, upon which their minds and imaginations may feast for a long time to come.

PART THIRD.

EDITORIAL

AND

AMERICAN MEDICAL RETROSPECT.

British Provincial Medical and Surgical Association.—By the Provincial Medical and Surgical Journal, for August 23d, we learn that the sixteenth anniversary meeting of this Association was held at Bath, on the 16th and 17th of August, 1848. On the organization of the meeting, the President, Dr. Heygate, resigned the chair to George Norman, Esq., the nominee in place of the president elect, deceased, for the coming year. In the course of his opening address, which had much to do with the Bath mineral waters, Mr. Norman stated, that "in the first anniversary report, in 1839 (?) it is stated that 313 was the number of its members. Since that time each year has added to their numbers, and we now report 1795 to be the present amount of members." The report to the Council contains the following, among many other particulars: The receipts of the Society for the past year was £1436 19s. 5½d. The volume of transactions for the present year has not yet been published. The question of Medical Reform is still unsettled—present prospects bid fair for the speedy passage and adoption of the proposed charter of the Royal College of Physicians of England. The prize of £50 for the best essay on the "Cerebral Affections of Infancy," was awarded to Dr. Duke, of Dublin. Dr. Hastings announced the presence of Prof. Wood, one of the members of the deputation from the American Medical Association; immediately after, Dr. Wood was unanimously elected an "Honorary Corresponding Member." In reply to the honor conferred upon him, Dr. Wood briefly alluded to his position there on the occasion; and in doing so added but another to the many evidences already evinced of his masterly talent and ability. At a subsequent meeting of the Association the following resolution was offered by Dr. Hastings, and seconded by Dr. Wallis, and unanimously passed: "*Resolved*, That this Association duly appreciate the value of the communication made by Dr. Wood, and fully agreeing with the sentiments entertained by the American Association, request Dr. Wood to convey to them the thanks of this Association." Dr. W. Davies, of Bath, read the "Address in Medicine," which embraced an admirable account of "Maculated Fever, its diagnostic characters, and the relations of sanitary measures to this and other forms of fever." Dr C. W. Bell, of Manchester, was appointed to deliver the Address in Medicine in 1849. Several very interesting papers were read, and cases related, in the course of the session. At the dinner which took place in the evening, after the close of the meeting, among the numerous toasts given, was one by W. Miles, Esq., M. P., viz., "The health of Dr. Wood of America." This called forth from Prof. Wood the following able and beautiful reply:

Dr. Wood returned thanks. He said, "Mr. Chairman and Gentlemen: It is with emotions that, I fear, may prevent the expression of all I feel on this occasion, that I rise to thank the present company for the honor they have done me, and more especially for the honor they have done my country through me. (*Cheers.*) Science, Sir, is universal—it is born of the necessities of our nature, and its objects are to promote the good of mankind; and therefore, its cultivators in every clime ought to be brethren. (*Hear, hear.*) If it be true of the great system of science, that by strong attraction, all parts are kept together, it is still more so in its inferior or subordinate relations. Like the planets of the solar system, though constituting a great mass of the stupendous whole, there is a closer affinity to each other than to other parts; so we, as scientific men, have a connexion, but as medical men, we are bound together by a yet stronger link. We, of America, have the same origin with you, which binds us by a yet closer tie. We have the same climate, the same literature, for we draw all our knowledge, (our scientific knowledge I mean,) from almost the same sources; and therefore, how important it is that we should cultivate the spirit of brotherhood. (*Hear, hear.*) Standing here as the representative of the profession in America, I may say also, as the representative of the intelligence of America, in relation to this country, for I believe, I may add, that in our land among the well informed, there is a universal prevalence of this feeling towards the mother country. I say, Sir, that we are extremely anxious to cultivate this reciprocal spirit, from those in the highest ranks of knowledge to the lowest grades of society. (*Cheers.*) We have, gentlemen, the fairest race on the earth. We have also the impulse of the Welsh or Celts, the steadiness of the Saxon or German character, and the energy of the Norman race; and we shall go on, unless interrupted by ambition, until all parts of the earth are impregnated with the Saxon knowledge and the Saxon religion, and to such an end I am bound to wish a speedy consummation. (*Cheers.*)"

EDITORIAL CHANGES.—Our space will only admit of a brief allusion to the changes, which have recently taken place in the editorial management of some of the Medical Journals of the United States. They are as follows: Drs. Carpenter and Fenner have retired from the editorial corps of the New-Orleans Medical and Surgical Journal, leaving Drs. Harrison and Hester the remaining Editors. Dr. W. C. Roberts has retired from the editorial management of the Annalist, and Dr. N. S. Davis succeeds him. The Missouri Medical and Surgical Journal has been merged into the St. Louis Medical and Surgical Journal, and Drs. Moore and McDowell, the editors of the former, have been transferred to the editorial corps of the latter.

PROFESSORIAL CHANGES AND NEW APPOINTMENTS.—Prof. F. H. Hamilton has resigned his appointment as Professor of Surgery in the Geneva Medical College. James Bryan, M. D., of Philadelphia, has been appointed to fill his place. Prof. H. M. Bullit has resigned his appointment as Professor of Physiology and Medical Jurisprudence in the Medical Department of the St. Louis University, and R. S. Holmes has been appointed to succeed him. W. M. M'Pheeters, M. D., one of the editors of the St. Louis Medical and Surgical Journal, has been appointed Professor of Clinical Medicine and Pathological Anatomy in the same institution.

Beck's Elements of Medical Jurisprudence.—Since the publication of our last number, which contained a paragraph taken from the Albany Journal, relating to the resignation of Prof. T. R. Beck, &c., we have learned that the labor of the authors in preparing a new edition of this valuable work are far advanced, Prof. J. B. Beck having at the present time very nearly completed the revision and extension of his portion of the work. The publication of it may be anticipated the coming spring.

A New Remedy in Acute Dysentery.

Marine Hospital, Staten Island, October 5th, 1848.

To the Editor of the New-York Journal of Medicine.

My Dear Sir :—With the hope that the introduction of a new remedy, in the *treatment of acute dysentery*, may alleviate much of the protracted and almost insupportable suffering usually attendant upon this disease, I would beg leave to inform you, that since the middle of September last, I have made a free use of the pulvis gum. guaiaci in all the cases of this malady which have come under my care, and without the slightest desire to change it for any other remedy. At first, I gave it in doses of ten grains, three times daily, mixed with some mucilaginous liquid; but afterwards, the following formula:

℞—Pulv. guaiaci, (this ought to be very fine, much finer than I could obtain it,) ʒv.
Mucilag. gum. acaciæ. Syrupi simp. āā ℥iij.
Aqua puræ, ℥viij. Misce.

Of this mixture, one wine-glassful (℥ij.) was directed to be given three times a day, or every six hours. It is well to observe, that the gum resin is not dissolved in the menstruum, but must be held in suspension by shaking the vial, and thus administered in substance.

The diet in the mean time has been amylaceous and mucilaginous. In the eleven cases in which I have employed this remedy, and I have used it in every stage of acute dysentery, the only occasional adjuvants were Dover's powder, 10 or 12 grs., with 5 grs. of calomel at night, when it was apprehended that, otherwise, the nights would be extremely distressing, and sometimes a blister over the abdomen; but in the majority of the cases, calomel, opium, ipecacuanha, castor oil, and every other popular remedy were entirely abandoned.

It was seldom necessary to administer more than twice the quantity of guaiacum specified in the above formula, for in four or five days, the disease was generally conquered, and then for allaying those irregular pains, which are necessarily consequent to the irritable or atonic state, in which the muscular fibres of the intestines are generally left after acute dysentery, resort was made to soothing remedies, such as pulvis g. tragacanth, in doses of 5 grains, frequently repeated, or mucilage of gum Arabic with syrup in 8 oz of which, about 2 grs. of the sulphate of morphia were held in solution.

I think guaiacum a remedy well worthy to be put to a fuller test by practitioners in the treatment of acute dysentery. I claim no originality as a discoverer on this occasion. I was induced to employ it in consequence of reading in one of the numbers of the Lond. Med. Gazette, its admirable effects in the hands of Mr. Bell, in cynanche tonsillaris; being thereby naturally led to infer that a material well adapted to repair a breach in one end of a canal, would, all other circumstances being similar, prove equally serviceable in patching up the other.

I am, very respectfully yours,
JOHN W. STERLING, M. D.

CASE OF LABOR WITH TWINS, *Interesting from its Novelty.* By David M. Sayre, M. D.—Communicated in a letter to L. A. Sayre, M. D., of this city, and by him forwarded to this journal for publication.—ED. *N. Y. Jour. of Med.*

Sparta, (*N. J.*) *Sept.* 11*th*, 1848.

DEAR DOCTOR,—Enclosed I send you the statement of an obstetrical case that fell to my lot a few days since, valuable, perhaps, more from its novelty, than anything else. It was new to myself, certainly, though engaged in the active duties of the profession for the last 20 years, and doubtless is of rare occurrence. Denman, Rigby, Gooch and Blundell make no reference to it. Dewees mentions two cases as occurring in the practice of others and attended with great difficulty in the delivery. The difficulty in my case was slight, from the fact of their being *premature.* Upon the discovery of their position, I congratulated myself, that they *were premature*, nor should much covet a like case of the *full time.* I made no measurement nor obtained the weight of either at the time, but the perfection of the form and the size of each induced me to consider them as rather eight than seven months. You can make what disposition of it you see fit.

Yours, truly,
To LEWIS A. SAYRE, M. D. DAVID M. SAYRE, M. D.

Case.—I was called Sept. 4th, 3 P. M., to see Mrs. D——, in labor; "she supposed herself to be seven months gone in her first pregnancy." Labor set in the evening previous after a hard day's work. The pains were strong, regular, and frequent, the os uteri nearly dilated; the membranes distended and protruding, and the feet presenting. No circumstance calling for interference, the position of the child favorable, viz. its back to the belly of the mother, the labor was suffered to proceed unaided. An hour was occupied in the delivery of the child to the neck, when its further progress was temporarily arrested. Examining for the cause of the delay, I found the head of a second child in advance of the first, low down in the pelvis, distending the perinæum on the right, and on the left in contact with and in the hollow or vacuity between the chin and sternum of the first. A short period was occupied in dilating the os externum, and both were delivered with their relative positions unaltered. The child first presenting died in the birth from compression of the cord, the second was delivered alive enveloped in its membranes unbroken. The placenta soon followed; there was slight laceration of the perinæum; both children were large for seven months. The woman was above the ordinary stature and the pelvis large and capacious.

I may here remark, that in my first examination I felt a fœtal head resting on the edge of the *brim* opposite the right acetabulum, which was doubtless the head of the second child, and that the membrane of the first did not rupture until it protruded externally.

PATHOLOGY AND PRACTICAL MEDICINE.

Death following Vaccination.—Dr. Greig, in the *North Western Medical and Surgical Journal*, reports having been called to attend a patient aged 18 years, who seven days before had been vaccinated on the arm. At the period of his visit erysipelatous inflammation extending from the axilla to the elbow existed; there was also present "a gangrenous patch two inches square (the centre of which was the vaccine puncture,) midway the arm on the outer side, and one twice that size on the under side. Pulse 120, a little resistance on pressure, tongue moist, slightly furred, and of a bluish shade; delirious, manner hurried, collapsed expression of the countenance, picking at the bed clothes, &c." He made use of yest and charcoal to the part, gave port wine, porter, and small portions of nitric acid; the patient died the following night. The editor of the *Ohio Medical and Surgical Journal* reports two cases which he saw in 1845. The main facts are these: twenty-four hours before, the mother of two healthy children, one five and the other seven years old, inserted into their arms some matter from a vaccine pustule with the point of a darning needle. The child from which the matter was taken was perfectly healthy, the mother of the children only noticed that it was thick and yellow. In a few hours both children became sick, nervous and prostrated; convulsions set in and one of the children died twenty-four hours after the operation, the other after some time recovered. At the points where the virus was inserted, in the arms of both children, were dry and angry-looking ulcers about two lines in diameter, without areola and apparently extending through the true skin.

These are exceedingly interesting cases—cases which would in no small degree harass the young practitioner, if not led to a serious though unjust drawback upon his professional reputation. We cannot at present point to a single case like the foregoing on record.

On the Treatment of Poisoning by the Bite of a Rattlesnake.—The September number of the *Buffalo Medical Journal* contains an article by Dr. Trowbridge in which he adduces strong testimony in favor of the use of sweet oil in cases of poisoning from the bite of a rattlesnake. The oil is to be used internally and externally, internally in doses of ℥ij. every half hour, and externally to the part by constant friction. Dr. T. does not claim any originality in the use of the article, on the contrary he cites several successful cases from old journals to show that it has been used with success. Prof. Williams has recently, in the Boston Medical and Surgical Journal, given his testimony in its favor, mentioning at the same time the successful use of the oil by his grandfather, Dr. Thos. Williams. Dr. Trowbridge, in closing his paper, says that the testimony adduced furnishes sufficient evidence to warrant its use, and a reasonable reliance upon its power as an antidote to the poison.

—

DIABETES MELLITUS. By *Prof. Flint.* (*Buffalo Med. Jour.*)—The presence of sugar in other secretions than the urinary secretion, and in the blood, which late researches have abundantly demonstrated, render it inappropriate longer to rank diabetes among renal diseases. It is a disease affecting the assimilatory processes, in consequence of which sugar ingested passes unchanged into the blood-vessels, and alimentary principles capable of being converted into sugar undergo that chemical change. The kidneys are involved only as one of the excretory outlets by which this useless saccharine material is eliminated from the system. The hyper-secretory action of the kidneys, (which is probably due to the presence of the sugar acting as an excitant,) constitutes an important element of the disease. This will serve to explain, in part, the dryness of the surface, the costiveness, the thirst, etc. The loss of those alimentary principles which contain sugar, or are capable of conversion into sugar, for all purposes of healthy assimilation, will explain the debility, the wasting, and the great gravity of the disease. We have thus advanced a considerable way in our knowledge of this disease; but we are still at a distance from a knowledge of the nature of the perversion which the processes of assimilation undergo, and of the ulterior morbid condition upon which this perversion depends. In other words, its true pathology, and as a matter of course, its ætiology are still unknown. The knowledge, however, which has been acquired is not without practical value. It prevents, in the first place, treatment based upon the idea of its being essentially an urinary disorder, and other false pathological views, and in this way saves the patient from measures which might prove not only useless, but injurious. This, although negative, is, nevertheless, not the least important of the advantages which attend improved knowledge of diseases generally. But it leads to a positive advantage in teaching the propriety of withholding, in as far as practicable, aliment of a saccharine nature, and aliment capable of being readily converted into sugar. In this way the quantity of sugar in the urine is almost sure to be considerably diminished, and, as a consequence, the amount of urine is lessened. Although the measure is but palliative, it is vastly important, inasmuch as, in itself, it serves to prolong the life of the patient, and gives time for the employment of means by which it may be hoped a cure will be effected. With reference to the latter, science gives but little precise information, and experience not much encouragement. Our rational course, in the present state of knowledge, is to endeavor to restore the proper action of all the functions, and especially, to modify and improve the processes of assimilation. For this end, tonic remedies, nutricious diet, and hygienic regulations of every description, are essential.

—

ACUTE GLOSSITIS IN AN INFANT—*Suppuration—Recovery.*—By J. A. Long, M. D. (*Southern Medical and Surgical Journal.*)—The child, aged nine months, had just recovered from scarlatina, and at the time of the attack was laboring under aphtha. When seen by Dr. Long, the tongue was enormously swollen, so much so as to fill the entire cavity of the mouth, and protruded to a considerable distance out of it, in a lateral direction. The following symptoms were present in the case, viz.: high fever; countenance flushed; pulse quick, small and much accelerated (164); respiration very difficult; a large quantity of viscid saliva adhering to the tongue which was hard to the touch, and the swelling confined principally to the left side. The child had not nursed for thirty-six hours. A free incision was made into the tongue when, to the surprise of the operator, about $1\frac{1}{2}$ ounces of pure pus was discharged, followed by almost immediate relief. Five hours after the child nursed freely—recovery, after a little time, was complete.

—

HEREDITARY SYPHILIS IN INFANTS. *By Dr. H. D. Bulkley.*–(*Clinical Lecture in Annalist.*) This form of syphilis is one of much interest in several respects; but I will only remark concerning it in the present case, that it is never primary in the infant, but always the sequel of a neglected or imperfectly-treated previous form, which is most commonly the scaly, but may be the papular or the pustular, and hence always affords unequivocal proof that the constitution is laboring under the infection. And here I would remark, that so far as my observation extends, every ulceration about the anus of a child under a year old, or about that age, should be regarded with suspicion. I will not say that they are necessarily venereal, but I have rarely, if ever, seen one that was not so, and never, in one instance that I can now recall, saw a case of flat tubercle or condylomata in this situation, at this age, (and indeed, I may say, at any other,) that was not syphilitic. I do not mean, of course, to include the excoriations and superficial ulcerations sometimes seen to follow neglect of cleanliness of these parts, but only elevations and ulcers which have continued any length of time, and can be traced to no definite cause. A striking case occurred in my practice recently, for the origin of which I can account in no other way. I was requested to see a child just a year old, represented by its mother as suffering from costiveness and pain on having a stool. Supposing it to be a case of the ordinary kind, I prescribed some simple laxative medicine. This, however, afforded no relief; and the mother then remarked that the child had a "pimple" which she wished me to examine, which she first noticed about three weeks before, and which had been gradually increasing. I found near the orifice of the anus, and on a line with the raphe, a small crest-shaped elevation, about three lines in length and two in breadth, of a pink color; and extending from the base of this, within the orifice of the anus, an ulcer, nearly circular, about four lines in diameter, with well defined, elevated, and slightly indurated edges, surface slightly yellow. The general health of the child was apparently good, though its complexion was somewhat brownish. There was no disease to be seen elsewhere, except a few enlarged sebaceous follicles on the face. It was ordered two grain doses of hydrarg. c. creta, night and morning, with tea-spoonful doses of castor-oil, if the bowels were not moved without it, and a little stramonium ointment to be applied to the sore. At the end of fourteen days, the ulcer had nearly healed, the condyloma was much smaller, the complexion of the child was much very improved, and the bowels were quite regular, with little or no pain at stool. The father denied ever having had any other form of venereal disease than a slight gonorrhœa a few years before, and had never suffered from any secondary symptoms, and there was not the least evidence of infection on the side of the mother.

As to the source of infection in the case now before you, the mother has never had the least secondary symptom, and there is every reason to believe that she has no share in it. The father positively denies that he ever had syphilis in any form, and never had any eruption nor sore throat; but he has one symptom which may be regarded as almost decisive on this point. He has complained for months past of a severe pain in the head, coming on every afternoon about three or four o'clock, and lasting until about the same hour next morning, for which he says that he has tried a variety of means without relief. This one symptom leads me to fix upon him as the source of the infection, and I shall test my diagnosis by the effect of mercury, and will communicate the result at some future time. This pain does not always exist in constitutional syphilis, but when a pain of this character, commencing at this hour, does exist, and resists other treatment, I should regard it as an important element in the diagnosis, and have often been much assisted by it. I shall treat the disease in the infant with hydrarg. c. creta, in doses of two grains, night and morning, and abstain intentionally from any local application, to show the effect of constitutional treatment alone, and will exhibit the case to you while in progress.

SURGERY.

Quack Surgery. *Scirrhous Tumour of the Mammary Gland—caustic Application—Death.* By D. Meeker, M. D., (*Ohio Med. and Surg. Jour.*)—The patient, aged 30, noticed for the first time, three years since, a tumour of the right mammary gland. It soon became painful, and rapidly increased in size; pains were lancinating and extended into the axilla and down the arm. At the time the part was first examined by Dr. M., the tumour was hard, ragged, very tender to the touch, skin corrugated and discolored, and approaching towards ulceration, its removal was advised, the patient dissented and sought relief from a " cancer doctor." A blister was first applied over the whole surface of the tumour—the cuticle was removed and a plaster, (which was afterwards acknowledged by the quack himself, to be composed of a large quantity of corrosive sublimate,) was applied, with directions to keep it on for twelve hours. The pain and burning which it produced, was described by the patient herself, as being as severe as the actual cautery, two hours after its application, the patient complained of a metallic taste in the mouth: she had nausea, griping pains in the stomach and bowels, soon attended with vomiting and violent spasmodic action of the whole muscular system. She remained in this condition for eleven hours, when the plaster was removed and a dose of laudanum given, and a regular physician sent for, who saw her 18 hours after the plaster was applied, and found her in the following condition; pulse 126, violent convulsions, constriction of the muscles of the pharynx, burning sensation in the œsophagus, nausea and vomiting, cold extremities, cold perspiration and great exhaustion. Remedial measures were resorted to with no relief, and Dr. M., saw her in consultation four days after the blister and plaster were applied. She then had hiccough, tender and tympanitic abdomen, vomiting, gums ulcerated and spongy, mercurial fetor of the breath, submaxillay glands enlarged and tender, and the surface of the body covered with mercurial erythema. The surface of the tumor presented a dark colored slough, which had not extended very deep into its substance. Prompt and energetic means were resorted to for the purpose of allaying the irritation and inflammation of the stomach and bowels, but all to no purpose; the patient died on the seventh day after the plaster was applied. [The rapid absorption of corrosive sublimate by the absorbents of the blistered surface in this case, is but another instance that may be added to the many already on record, proving that the absorbents have much to do with the phenomena, evinced by, and the philosophy of remedial agents.—Ed. *N. Y. Jour. Med.*]

Chloroform in Surgical Practice. By Prof. Mussey, (*Boston Med. and Surg. Jour.*)—We have performed *fifty-nine* operations on patients under its influence, and there has not been a single instance in which it has left unpleasant effects. "We prefer it to ether, on account of the smallness of the quantity required, the greater certainty of its making the requisite impression, the greater expeditiousness of its operation, the less irritation it gives to the glottis, its inferior liability to agitate the voluntary muscles, and the more speedy evanescence of its influence after the patient has ceased to inhale it." In two instances, the operation of lithotomy was performed on the young subject; one a boy of 8 years, the other a boy of 12, the operation and recovery were both satisfactory. A clergyman laboring under extensive ulceration of the knee-joint; he was excessively sensitive and much reduced by the disease, he entertained the deepest horror of the operation; he was put under the influence of chloroform and the limb removed, when he awoke, he gave thanks to God for having bestowed a boon of such priceless value upon the family of man. When administered to patients in the horizontal position, with an empty stomach, and introduced gradually into the lungs, the safety of this agent need not be questioned(?). There is a dose of arsenic or opium that can kill, and at the same time another dose that is entirely safe; it is so, we believe, with chloroform; and we cannot help regarding it one of the most important gifts for the relief of human suffering that a kind Providence has sent in this or any other age.

—

OBSERVATIONS ON KELOIDE. By T. L. Ogier, M. D.—(*Charleston Med. Jour.*)—From the above cases, and many others of a similar nature, keloide would seem to be of local origin; to be a disease confined entirely to the skin, but there is one peculiarity in this affection which is allowed to exist by all surgeons, viz.: The certainty of the disease being reproduced in the cicatrix whenever the tumor is extirpated. If it was superficial and confined to the skin alone, this would certainly not be the case; it is not so with any other tumor; and yet it cannot be a disease of the general system, for beside that the general health of the patient during the existence of keloide, is good, we find that after extirpation, these tumors return in the *cicatrix* of the *wound* made by the *operation*—it shows no disposition to return in any other part of the body, like cancer. After an operation for cancer, the disease may be entirely eradicated from a certain point, but will afterwards appear in some other organ, remote from the original seat of the disease; but in keloide, if the disease be not reproduced in the original location, it will not be any where else. What the cause of this difference is seems very difficult to determine, and I do not attempt to offer any satisfactory exp'anation of it; but the following has occurred to me as the most rational way of accounting for the reappearance of this disease after extirpation.

Keloide appears to be at first a fibrous growth from the skin, projecting slightly from its surface as a hard round or oval tumor. After a time this degeneration takes place internally along the capillary vessels, and finally along the small arteries which furnish blood to the skin. When we extirpate a keloide tumor then, and think we have taken out every portion of the disease, we leave these affected arteries, the wound is closed, and union takes place between its lips, but the blood and lymph which carry on this healing process come from these diseased arteries; and these vessels themselves throw out branches in the newly-formed tissues, and carrying the disease there, the new cicatrix is again thus covered with a keloide tumor.

—

CASE OF A LARGE TUMOUR INVOLVING THE SUPERIOR MAXILLARY BONE.—*Operation by Prof. Pancoast.* Reported by J. V. Patterson, M. D. (*Medical*

Examiner.)—Rachel Flora, aged 18, a strong, healthy colored girl, residing in Bucks Co., Pa , had suffered from the presence of an epulis tumor of the upper jaw for the last ten years.

When she was two or three years old, and then living in Virginia, she had a tumor of the same description removed from her upper jaw by a physician of that State ; but after an interval of three or four years it returned again, and has been gradually increasing, until it has attained its present size. The tumor as it now appears, extends from the anterior part of the superior maxillary bones, across the mouth, as far back as the epiglottis, being attached in front to the alveoli of the incisor teeth, and behind to the palatine processes of the superior maxillary, filling up the cavity of the mouth, and materially interfering with respiration and deglutition, so that for the last few months the patient has been nourished entirely by liquids. In its character the tumor evidently belongs to that class of tumors known under the name of erectile, vascular in its nature, swelling up and pulsating forcibly under the least excitement of the circulation, so as to threaten the patient with suffocation. Only a few days after her arrival in this city, she had an attack of hysteria, during the paroxysm of which, the tumor swelled up to such an extent, as to endanger her life by suffocation, and to demand the free use of the lancet.

As the removal of such a vascular mass would necessarily give rise to a vast amount of hemorrhage, it was deemed expedient and requisite to tie the primitive carotid artery of that side ; for the ligation of the external carotid alone would not suffice, as there existed such a free anastomosis between the vessels of the external and internal carotids, secondary hemorrhage would be likely to take place, which might prove fatal. Accordingly, on the 6th of November, Prof. Pancoast, in the presence of the class, performed the operation for ligation of the primitive carotid on the left side, after the usual manner, and succeeded in passing a ligature around the artery, though the struggles of the patient and the great fear lest she should have a hysterical convulsion during the operation, made this a rather difficult undertaking. Every thing went on favorably, and in the course of two weeks she was prepared to have the whole tumor removed.

On the 20th of November, the patient having been brought into the amphitheatre, Prof. Pancoast removed the whole of the diseased mass after the following manner :

The face being placed opposite a strong light, and the head of the patient supported against the breast of an assistant, an incision was made through the cheek, from the left angle of the mouth, in a semicircular direction, towards the outer canthus of the eye, after the manner of Velpeau's operation, so as to avoid wounding the parotid duct and the portio dura nerve.

The flap was then rapidly dissected back from the bone, and with a small saw the superior maxillary was divided transversely by an incision parallel to the alveolar processes, then with a strong pair of cutting forceps a vertical incision was made through the bone at each end of the transverse, one by the side of the last incisor tooth on the right side, and the other by the last molar tooth on the left, and the mass, thus isolated from its bony attachments, was quickly removed. The hemorrhage following was restrained by the use of the actual cautery ; and the wound having been plugged with lint, the lips of the incision were united by hair-lip suture and adhesive strips, and the patient placed in bed, and ordered to live on a liquid diet.

The wound in the cheek healed up by first intention in five days, and, on the tenth day after the operation, the condition of her mouth was such that she was enabled to eat meat, a thing which she had not done before for several months. The wound of the jaw rapidly filled up with healthy granulations, and in three weeks after the operation she was discharged cured. The ligature of the carotid came away on the 30th of December, and in the first week of January she returned to her friends in Bucks County, highly pleased with the results of the operation.

MIDWIFERY AND DISEASES OF FEMALES.

OVARIAN DISEASE—*Removal of the Tumor—Recovery.* By H. Miller, M. D., (*Western Jour. of Med. and Surg.*)—The patient, a widow aged 37, first observed a tumor of no great size in the right iliac region, some time during the fall of 1847, from which time it began to increase rapidly until it attained an enormous size. She had felt no acute pain in the tumor; menstruation was absent from the first. She insisted upon its removal. On the 29th of March, 1848, a consultation was called, consisting of Prof. Gross, Drs. Caldwell, Bayless and Colescott. The tumor was punctured about three inches below the umbilicus, and *twelve pints* of a characteristic fluid was discharged. When the fluid ceased to flow, the abdomen was flaccid to the left of the linea alba, and a short distance to the right; but in the right iliac region reaching up to the ribs of the same side, it felt hard and unaltered in shape, no unpleasant symptom followed the tapping. On the 6th of April, following, in the presence of the above-named gentlemen and several others, chloroform was administered: after which, an incision was made, extending from the umbilicus to the pubes in the ordinary manner. The tumor was found adherent, slightly, to the omentum and parietes of the abdomen; the adhesions were broken up, after which several punctures were made in the tumor in order to diminish its size sufficiently to allow of its passage through the incision, after which a ligature was applied to its pedicle and the tumor removed, some hemorrhage followed, which required the application of a second ligature; this, together with the fluid from the punctured cysts, which flowed into the abdominal cavity was carefully sponged out and the incision was closed by the interrupted suture. No unfavorable symptom followed; the sutures were removed on the 19th inst. following; on the 25th, one of the ligatures came away, and on the 7th of May, the second, at which time the wound was firmly closed, excepting at the point where the sutures came away. On the following day, she left in a wagon for her home, some distance in the country, apparently perfectly recovered. The tumor, notwithstanding the punctures and tapping, weighed nine and a quarter pounds. It is composed of many cysts of various sizes, having strong thick walls and filled with the same ropy white fluid as that discharged by the trochar.

SINGULAR CASE OF UTERINE FLESHY MOLE. By R. R. Stone, M. D., (*N. W. Med. & Surg. Jour.*)—Mrs. H., aged 45, had been troubled with an enlargement of the uterus for some fifteen years. The distention commenced soon after a time when she considered herself pregnant, from the fact that there was a cessation of the menses at the time for some seven periods, but which again made their appearance, although quite irregular as to time and quantity. The uterus increased in size, rose in the pelvis, and seemed to go through the several stages of gestation with apparent motion of the child, until the seventh month when irregular pains commenced, and medical aid was called, but attempts to remove the then supposed dead fœtus did not succeed. She remained in that situation, partially recovering her health, but the distention remaining nearly the same, for six years, within which time she became pregnant, and was delivered of a living child. During the period of gestation the enlarged uterus extending into the upper abdominal regions, and pressed hard upon the stomach and liver. After delivery the tumidity continued about as before pregnancy. Catamenia still irregular until last fall, when Dr. Coon, my partner, visited the patient. October 10th, by his request I saw her with him. She then presented the following symptoms. The uterus, which was enlarged to about the size of one in the seventh or eighth month of gestation, occupied principally the middle and right lower abdominal regions, the right side or the fundus being very hard and tender upon pressure. She suffered continually from pain, which was mostly over the region of the tumor, but extended to the loins and down the thighs. But little could be ascertained concerning the nature of the contents of the uterus by examination per vaginum, as the os uteri was rigid, nearly closed, and above the superior strait. A small quantity of sanious and purulent fluid escaped during most of the time, together with small fragments of ossific matter, resembling caries from the size of the finger-nail to mere powder. Small fleshy masses were also frequently passed, some weighing over an ounce. As the patient was extremely weak, anodynes and tonics were administered.

But little relief was at first obtained. After a time, however, she began to convalesce, and was able to be about the house and ride out occasionally, and remained so until April 30th, when, after riding six or eight miles in a lumber wagon, the former symptoms returned with increased severity. She was then seen by Dr. C. and myself. Had irregular uterine pains which distressed her much, but which were allayed by opiates. The os uteri still remained rigid. An ointment of belladonna was applied to the cervix which dilated the os tincæ in a measure. The pains, which were now permitted to go on, continued about 48 hours, when a soft, apparently fleshy mass, which presented at the superior strait, was finally, with manual assistance, expelled, when nearly a gallon of semi-purulent fluid escaped, together with so much fœtor that it was almost impossible to remain in the room. The substance expelled, upon examination, was found to consist of a homogeneous conglobate mass, weighing about four and a half pounds, of a yellowish color, resembling healthy liver in consistence, but much more elastic and covered externally with scales of ossific matter. It was about ten inches in length, four in width, and from two to three in thickness, being somewhat wedge-shaped. Upon making an incision longitudinally, a cartilaginous line was found to run transversely, and another to cross this at right angles, running the whole length.

The uterus contracted but partially at first, but it continued to contract and descend, so that at present it has assumed nearly its natural position, but is considerably enlarged, which condition I presume will remain. The ossific scales have continued to pass and are occasionally discharged at the present time. The fluid discharge continues, but in much less quantity. The patient is now able to walk a half mile, and is daily improving.

STRICTURE OF THE VAGINA COINCIDENT WITH LABOR.—By Prof. C. D. Meigs, (*Trans. of the Col. of Phy., Philadelphia.*)—On the 11th of April, 1845, the patient was delivered of her second child, and soon after was seized with fever, attended with some peculiar symptoms, which were found to result from a retroversion of the uterus that had occurred before the uterus had become entirely reduced to its normal size and condition after parturition. During the remainder of 1845, and the whole of the ensuing year, the patient remained in tolerable health; early in 1847, she began to complain of pelvic pain, attended with some discharge from the vagina. She at first declined submitting to an examination to enable Dr. M. to ascertain the condition of the uterus and vagina. Her symptoms, however, increasing, she permitted finally the examination to be made: the neck of the uterus was found to be in a condition which induced Dr. M. to suppose, at first, that it was carcinomatous, but on resorting to the speculum, he ascertained that the neck of the uterus was the seat of an extensive ulceration, which did not appear to be of a malignant character.

The superfices of the ulcer were equal to that of the fingers of one hand; there was considerable thickening of the parts affected, and portions of the surface were removeable in the form of scales. It was treated by the nitrate of silver, but without any benefit resulting; the acid solution of the nitrate of mercury was substituted, and under its use the ulcer healed rapidly, and the general health of the patient soon improved, and became pretty well re-established by the time the ulcer was entirely cicatrized. As the ulcer healed, however, a very considerable contraction of the upper portion of the vagina took place, by which its cavity was reduced in diameter to that of an ordinary silver pencil. By the first of January of the present year, the lady became pregnant, and about the 10th of July labor pains were experienced. In an examination, to determine the condition of the vagina and os uteri, it was with the greatest difficulty Dr. M. succeeded in introducing his index-finger through the stricture. Opiates, rest, &c., were resorted to in order to keep off the labor. On the 20th of the month, the patient had very severe pains; the membranes, which were uncommonly tough, were gradually protruded beyond the vagina. All the means calculated to produce a relaxation of the vagina were resorted to; sulphate of morphia was administered by the mouth; the patient was immersed in a warm bath; mucilaginous fluids were injected into the vagina; and the strictured portion freely anointed with an ointment containing extract of belladonna. The vagina was finally dilated by the advancing head, and on the morning of the 21st the child was born, without instrumental assistance.

—

CASE OF TWINS OF EXTRAORDINARY SIZE.—Dr. Bertolet, of Pa., furnishes, in the Medical Examiner for August, the particulars of a case of delivery of twins, where their combined weight was twenty and three-quarter pounds. The labor of the first was natural, that of the second attended by hemorrhage which, after a short time, rendered it necessary to apply the *long forceps;* their application was attended with considerable difficulty, owing to the head not being firmly engaged in the superior strait, the child was still-born; the hemorrhage ceased immediately on its delivery—no unpleasant symptom occurred to retard the quick recovery of the patient.

—

PROLONGED GESTATION—*A Case in which the Date of Conception was accurately ascertained.*—Dr. McIlvain, in the American Journal Med. Sci. for July, publishes the facts of a case of gestation, "prolonged to probably 296, certainly to 293 days," which occurred under his own personal observation. The parties are, says he, of unexceptionable character: and the statement of the husband may be implicitly relied upon.

Mrs. ——, whose character is above suspicion, was visited on the evening of July 1st, 1847, by her husband, whose business had compelled him to reside for more than a year before in a distant state. The husband remained till the morning of the 6th of July, and then departed, and did not return for more than nine months. On the nights of the 1st, 2d, 3d, and 4th of July, there was sexual intercourse between the parties, but none on the night of the 5th, or after. Shortly after Mrs. —— considered herself pregnant, and on the 23d of April, 1848, was delivered, after an easy labor, of a fine healthy female child, weighing nine pounds.

Dr. McI. makes the following comments on the case which we subjoin, not however with the intention of giving credence to the "conclusive evidence," which the Dr. believes the facts of the case furnish.

Supposing impregnation to have occurred on the night of the first, as a consequence of the first coition, the duration of the pregnancy must have been 296 days, but if we suppose the last copulation to be the one from which the pregnancy resulted, the period of gestation was 293 days.

This case is interesting, inasmuch as it furnishes conclusive evidence, that gestation may be prolonged to thirteen, if not sixteen days beyond the usual period.

The large size of the child—being full a pound and a half above the average weight of female children, is a circumstance in favor of its having been carried beyond the usual period.

The mother had borne three children previously, none of which weighed over eight pounds.

SUPERFŒTATION. By A. N. Read, M. D., (*Medical Examiner.*)—A mare at one birth brought forth a well-formed *colt* and a *mule.* She was put to the horse some two or three weeks after having received the jackass. Six months after birth, both the colt and the mule were doing well. The fact of impregnation by different males is not new to physiologists, but the great difference in time in this instance, led Dr. Read to communicate the facts of the case to the profession.

DISEASES OF THE OS AND CERVIX UTERI IN THE UNMARRIED. By T. D. Massey, M. D. (*Ohio Med. and Surg. Jour.*)—The author confines his paper to description of engorgement, ulceration and induration as sequelæ of inflammation, this latter state has its rise in, 1st, retarded or retained; 2d, suppressed, and 3d, painful menstruation; either of these states may and generally do, in the unmarried female, after a time, induce congestion, terminating in inflammation of the os or cervix uteri. The first and generally characteristic symptom of this affection is irritation of the bladder, frequent desire to micturate, with pain both in retaining and passing urine. Constitutional treatment, he believes, had better be dispensed with entirely. The cold douche upon the lower part of the spine is the remedy which he places the most reliance upon, in staying the progress of the disease. Among the topical applications in the treatment of inflammation and ulceration of these parts, he gives preference to the nitrate of silver, his mode of using it is as follows:

> The finger of an *elastic kid glove,* of appropriate size, is procured, and an eighth of an inch clipped off its extremity, so as to admit the tip of the finger to peer through. This is drawn upon the finger and well smeared with lard. The caustic holder (for here of course, the material to be used can only be of the solid form) is now pushed within the sheath and upon the finger, the nitrate of silver, the substance mostly used, being occluded, and the finger with is company passed within the vagina; when the os is detected, and the diseased spot located, the other hand pushes forward the holder till the caustic rests upon the extremity of the ball of the finger, which guides it to the designated point. This being done, the nitrate is withdrawn again within the glove, and removed as it entered. In this manœuvre, of course the integument of the finger is liable to suffer some. But a solution of iodide of potassium or even table-salt dissolved in lemon-juice, or tartaric acid and water previously placed convenient, and in which the finger is immersed immediately upon extraction, will remove the effects entirely.

MATERIA MEDICA AND PHARMACY.

ADULTERATED MEDICINES. *Extracts from the Hon. Dr. Edwards' Report on Imported Adulterated Drugs and Medicines, &c., read before the House of Representatives, June 2d,* 1848, (*Continued from page* 118.)—As elaborate as has been the statement of facts already presented, we are unwilling to dismiss a subject of such vast importance without presenting *additional information.* Dr. Bailey of whom we have spoken before, has had submitted to him by the committee a series of questions which we subjoin. His means of acquiring information, his careful observation, together with his general intelligence and integrity, commend to our confidence his answers to these inquiries.

Qu ry. How long have you held the position of examiner of drugs, medicines, chemical preparations, &c., in the appraiser's department of customs at the port of New-York ?

Answer. Since the 3d day of December, 1846.

Query. What is the amount of drugs, medicines, &c., &c., annually imported into New-York ?

Answer. The merchandise of this description entered at the New-York custom-house, during the year 1847, amounted to something near one and a half millions of dollars ; I cannot name the precise amount, as no separate record of that branch of trade is at present kept in the custom-house.

Query. What proportions do the importations of drugs, medicines, chemicals, &c., into New-York, bear to those entered at the other ports in the United States ?

Answer. According to the records in the Treasury Department, full three-fourths of the entire amount of that class of merchandise is passed through the New-York custom-house.

Query. Will you have the kindness to state, as near as your memory, or any memorandums you may have, serve you, the quantities of some of the more important drugs, &c., imported into the United States, or into New-York, during the past year.

Answer. The quantity of camphor, crude and refined, (principally crude,) imported into the United States during the year 1847, amounted to 177,403 lbs. Opium, imported during the same period, 85,238 lbs. The quantity of Peruvian bark imported into New-York, the same year amounted to 495,300 lbs.; Rhubarb root, 87,640 lbs.; Gum Arabic, 245,270 lbs.; Gum Myrrh, 7,300 lbs.; Iodide or hyd. potass, 18,450 lbs.; Calomel, 5,680 lbs.; Morphine, 5,600 oz.; Magnesia (calc. and carb.), 147,300 lbs.; Jalap root, 26,350 lbs.; Refined borax, 248,360 lbs.; Acetic acid, 19,700 lbs.; Sarsaparilla root, 75,000 lbs.; Oil of anise, 7,342 lbs.; Tartaric acid, 57,470 lbs.; Cream of tartar, 805,000 lbs.; Gum ammoniac, 9,490 lbs.; Gum assafœtida, 18,960 lbs.; Iodine, 6,340 lbs.; Blue pill mass, 4,475 lbs.; Sulphate quinine, 11,700 oz.; Supercarbonate of soda, 344,270 lbs.; Epsom Salts, 60,900 lbs.; Carb. of ammonia, 180,000 lbs.; Senna, 51,300 lbs.; Oil of cassia, 9,830 lbs.; Extract of liquorice, 462,000 lbs.; Balsam of tolu, 5,800 lbs.; Balsam of copaiva, 108,350 lbs.

Query. What proportion do adulterated, misnamed, and vitiated articles bear to those that are pure and of the proper strength ?

Answer. More than one-half of many of the most important chemical and medicinal preparations, together with large quantities of crude drugs, come to us so much adulterated, or otherwise deteriorated, as to render them not only worthless, as a medicine, but often dangerous.

Query. Name, as far as you can, the articles most commonly adulterated, or otherwise deteriorated, the manner of adulteration, &c., and the consequent difference in price between the vitiated and genuine article, with such other suggestions as you may deem to pertain to this question ?

Answer. Opium is at present more frequently adulterated with liquorice paste, combined with a bitter vegetable extract, likewise with an extract made from the poppy plant, with an admixture of the leaves. An article called opium is prepared and sold for exportation in the foreign markets, composed of liquorice paste, extract of poppy-heads and leaves, and a small portion of gum tragacanth, and a bitter vegetable extract. Another article of opium comes to us, more or less, and in some instances, entirely deprived of its active principle, the same having been extracted for the manufacture of morphine.

So called opium has passed the New-York custom-house, within the last twelve months, so highly charged with liquorice paste, that not only was the smell very perceptible, but on account of the excess of saccharine matter thereby furnished, the worthless mass was alive with worms! Some of these adulterations are invoiced as low as one-third the price of pure opium, and of course are not worth that.

Calomel is adulterated with chalk, sulphate of barytes, and white lead, and furnished by the foreign manufacturer at about two-thirds the price of the genuine.

The *mercury or quicksilver* of commerce is generally impure; *lead*, *bismuth* and *zinc* are found mixed with it. It should never be used in the preparation of medicine without previous purification.

Red oxyde of mercury or *red precipitate* is frequently mixed with *red lead.*

Blue pill mass is greatly and extensively adulterated. This article, when pure, should contain thirty-three and a third per cent. of *mercury*, combined with *conserve* of *roses*, &c.; but a spurious article has been imported to a considerable extent within the past few years, which is found, on analysis, to contain less than one-fourth part of that quantity, basely mixed up with earthy substances, &c. This worthless article is purchased from the foreign manufacturer at about one-half the price of the genuine.

Sulphate of quinine, another very important medicine, is frequently adulterated with *salicine*, *chalk*, *sulphate of barytes*, &c., rendering it comparatively worthless, if not dangerous as a medicine. This spurious article has been imported and sold in New-York (neatly put up with the name, label, &c., of a popular manufacturer) by the agent of a foreign establishment, at the rate of *ninety cents* an *ounce*, when the genuine foreign article could not be purchased of the manufacturer for less than *two dollars and twenty-five cents* an ounce.

Large quantities of iodine are sent to us in bulk, and in a very impure condition, by foreign manufacturers and speculators. It is almost worthless as a medicine; but, nevertheless, it is bought up by *our* speculators, who have it neatly put up in small bottles, &c., and sell it as a good article. The same with *iodide* or *hydriodate of potass*, which is frequently found adulterated with *nit. potass*, *(saltpetre)* sal. acetocella, &c. *Bromide* of *potassium* is labelled and sold as genuine hydriodate.

Many of the foreign medicinal extracts are prepared and sold in reference to *price*, rather than *strength* and *purity.* The foreign manufacturers prepare any *quantity* called for. *Compound extract* of *colocynth* (as the label imports) comes to us in a manner well calculated to deceive, but on examination, is found to contain not one particle of *colocynth.* This spurious article is invoiced at about one-third the price of the genuine article. *Extract of Peruvian bark*, *sarsaparilla*, *rhubarb*, *hyoscyamus*, *jalap*, &c., &c , of a like inferior description, are constantly being imported to a greater or less extent.

Very little, if any, of pure Russian castor finds its way to this country. An imitation compound of *dried blood*, *gum ammoniac*, and a little real *castor*, put up in artificial bags, is the article generally met with.

But one invoice of *real musk* has been imported into New-York during the past eighteen months, while very large quantities of the artificial have been imported direct from Canton, where the manufacture is carried on to a great extent. This impure article is invoiced at less than one-fifth the price of the genuine, and is not possessed of any medicinal quality.

Very little pure and prime *gum myrrh* is imported; most of it is adulterated by the admixture of other and inferior gums.

Most of the *gum ammoniac* now imported is more or less adulterated with common resin and earthy substances. It sells for less than one-third the price of the *guttæ ammoniaca*, or pure gum. The latter is now seldom met with.

Gum assafœtida is most extensively adulterated with inferior mucilaginous gums, chalk, clay, &c. An invoice of some *four* thousand pounds of this article passed the custom-house at New-York not many months since, and not one pound of which was proper to be used for medicinal purposes without previous purification.

Peruvian bark comes greatly mixed, and no small portion of it of a very inferior and worthless quality. We know of even twenty-five distinct species of this bark, and, as may be supposed, they differ greatly in strength and price. Considerable quantities are shipped to this country after having had the active portion extracted for the purpose of manufacturing *extracts of bark*. The best article is imported or purchased for the manufacture of *quinine*; the other for powdering. It comes invoiced from five cents to one dollar per pound, according to the place of purchase and the quality of the bark. *Peruvian bark*, fit to be used in medicine, can only be bought at the place where produced, at from thirty-five to seventy and eighty cents per pound.

No pure *Aleppo scammony* has for a long time been imported through the New-York custom-house, because the article inferior in strength and purity has taken its place in the market. The *Smyrna scammony* is always adulterated with some worthless vegetable extract, flour, ashes and clay. An article *called Smyrna scammony* (and a fair imitation) is occasionally imported, which has proved to be a combination of *jalap*, *gamboge*, *chalk*, *gum Senegal* and *ivory black*, without a particle of real *scammony* in its composition.

Thousands of pounds of worthless rhubarb root are sent out annually to this country for a market, by foreign speculators, principally from England. London being the greatest drug market in the world, it is but reasonable to suppose that large quantities of crude drugs, of a greatly deteriorated and inferior quality, must necessarily be constantly accumulating in their warehouses, which, on account of the long existing laws of that country, cannot find a home market, and, in consequence, must either be destroyed or exported to some place where there is no law to prevent their introduction. The article of rhubarb I have alluded to, is found, on examination, to be either greatly deteriorated by age, or as having been deprived of its medicinal virtues by decoction, for the purpose (as with the Peruvian bark above named) of manufacturing extracts.

This worthless drug is generally found to be what was once East India rhubarb, and is invoiced at from four to fourteen cents per pound, when at the same time the most ordinary *fresh rhubarb* of the kind, fit to be used for medicine, cannot be purchased at the place of production for less than thirty-five to fifty dollars per hundred pounds. This trash is bought up by speculators for powdering, and is sold to the unsuspecting retailer as a " fair article."

More than one-half of the *cinnamon* imported into New-York, during the past year, was a very inferior article; some of it nearly tasteless, on account of its virtue having been extracted by distillation, in the manufacture of the *essential oil*. Most of the oil of cinnamon comes more or less adulterated with inferior oils; and the same may be said of most of the other medicinal essential oils.

More than three-fourths of what is called *Croton oil* imported, is either adulterated, or an oil of inferior quality, made from an entirely different seed from that which furnishes a genuine article.

Much of the rectified medicinal naphtha imported is a crude preparation, and very impure. This, as well as many other medicinal preparations, such, for instance, as iodine, hydriodate of potass, magnesia, Epsom salts, &c., are made in considerable quantities, without the requisite care, in the large foreign chemical establishments, where their regular business is to manufacture only the coarser chemical preparations, used almost exclusively in the arts. Of course these articles, being hastily and imperfectly prepared out of the "odds and ends," and as rudely put up for market, can be afforded at a much less price than the pure article. It is now common for the foreign manufacturer to send out to this country these articles, on consignment, with his other preparations, used in the arts. It may not be amiss for me here to say, for the benefit of the medical profession and dealers generally throughout the country, as well as for the *army* and *navy surgeons*, who purchase chemical and medicinal preparations for the public service, that too much reliance, in their selections, must not be placed upon what purports to be the *name or label* of some noted and foreign popular manufacturers, which they may find attached to the bottle or package. For it must be borne in mind that, while many of the adulterated, fine chemicals, &c., come to us neatly put up in small quantities for the retail trade, bearing a fictitious label, much of the very crudely and imperfectly manufactured chemicals I have named, together with considerable quantities of *morphine*, is imported in *bulk*; or, in other words, in bottles or cases, containing seven pounds each, and bearing only the name of the article; giving us no clue to the real manufacturers beyond what may be gathered from the name of the exporters upon the invoice; and they are not unfrequently foreign commission merchants. Notwithstanding this, these crude and impure articles, in bulk, find, I regret to say, ready purchasers among the unprincipled dealers, who have them put up in small quantities, (similar to the genuine,) in foreign bottles, imported expressly for the purpose; to which is, afterwards, attached a neatly executed imitation label of some well-known foreign manufacturing chemist. The articles are then ready for market, and are purchased by the unsuspecting, (for circulation throughout the country,) I fear, too often, on account of the label, and general external appearance of the bottle, without proper attention to the contents. Hence the reason many chemical preparations fail to meet the reasonable expectations of the country practitioners, who have neither time, means nor opportunity of analysis.

Query.—Whence do we derive the largest proportion of these adulterated and deteriorated medicines?

Answer.—The largest quantity comes from England; but other portions of Europe furnish more or less of these base compounds and worthless drugs.

Query. Why has this base traffic been allowed to continue so long without a public exposé, and some attempt being made at New-York to arrest its progress?

Answer. Attempts have been made. The New-York College of Pharmacy have for years been engaged in the endeavor, by force of reason, to put a stop to the trade in these adulterated articles, as far as facts came before them. The medical profession have been awake to the vital importance of the subject, but, until some eighteen months past, there has been no person in charge of that branch of trade in the custom-house who had a practical knowledge of drugs and medicines in their composition, &c., from whom any data could be obtained showing the extent of these frauds.

The Hon. Jno. C. Spencer, when Secretary of the Treasury, was appealed to, to remedy the deficiency the profession felt to exist in the customs. He replied most favorably, but as the request was made about the time he retired from that office, he could not carry these wishes into effect. The present Secretary of the Treasury was next appealed to, and promptly entertained the subject as one of the greatest importance, and did not lose sight of it until effective measures were taken, at his request, to fathom the depth of the evil complained of."

AN ACT to prevent the importation of adulterated and spurious drugs and medicines.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled: That from and after the passage of this act, all drugs, medicines, medicinal preparations, including medicinal essential oils, and chemical preparations, used wholly or in part as medicine, imported into the United States from abroad, shall, before passing the custom-house, be examined and appraised, as well in reference to their quality, purity, and fitness for medical purposes, as to their value and identity specified in the invoice.

Sec. 2. And be it further enacted, That all medicinal preparations, whether chemical or otherwise, usually imported with the name of the manufacturer, shall have the true name of the manufacturer, and the place where they are prepared, permanently and legibly affixed to each parcel, by stamp, label, or otherwise ; and all medicinal preparations imported without names affixed as aforesaid, shall be adjudged to be forfeited.

Sec. 3. And be it further enacted, That if, on examination, any drugs, medicines, medicinal preparations, whether chemical or otherwise, including medicinal essential oils, are found, in the opinion of the examiner, to be so far adulterated, or in any manner detoriorated, as to render them inferior in strength and purity to the standard established by the United States, Edinburgh, London, French and German pharmacopœias and dispensatories, and thereby improper, unsafe, or dangerous to be used for medicinal purposes, a return to that effect shall be made upon the invoice, and the articles so noted shall not pass the custom-house, unless, on a re-examination of a strictly analytical character, called for by the owner or consignees, the return of the examiner shall be found erroneous ; and it shall be declared as the result of such analysis, that the said articles may properly, safely, and without danger, be used for medicinal purposes.

Sec. 4. And be it further enacted, That the owner or consignee shall at all times, when dissatisfied with the examiner's return, have the privilege of calling, at his own expense, for a re-examination ; and, on depositing with the collector such sum as the latter may deem sufficient to defray such expense, it shall be the duty of that officer to procure some competent analytical chemist possessing the confidence of the medical profession, as well as of the colleges of medicine and pharmacy, if any such institutions exist in the State in which the collection district is situated, who shall make a careful analysis of the articles included in said return, and a report upon the same under oath ; and in case the report, which shall be final, shall declare the return of the examiner to be erroneous, and the said articles to be of the requisite strength and purity, according to the standards referred to in the next preceding sections of this act, the entire invoice shall be passed without reservation, on payment of the customary duties ; but, in case the examiner's return shall be sustained by the analysis and report, the said articles shall remain in charge of the collector, and the owner or consignee, on payment of the charges of storage, and other expenses necessarily incurred by the United States, and on giving a bond with sureties satisfactory to the collector to land said articles out of the limits of the United States, shall have the privilege of re-exporting them at any time within the period of six months after the report of the analysis ; but if the said articles shall not be sent out of the United States within the time specified, it shall be the duty of the collector, at the expiration of said time, to cause the same to be destroyed, holding the owner or consignee responsible to the United States for the payment of all charges in the same manner as if said articles had been re-exported.

Sec. 5. And be it further enacted, That in order to carry into effect the provisions of this act, the Secretary of the Treasury is hereby authorized and required to appoint suitably-qualified persons as special examiners of drugs, medicines, chemicals, &c. namely : one examiner in each of the ports of New-York, Boston, Philadelphia, Baltimore, Charleston, and New-Orleans, with the following salaries, viz, at New-York, sixteen hundred dollars per annum ; and at each of the other ports above named, one thousand dollars per annum ; which said salaries shall be paid each year, quarterly, out of any moneys in the treasury not otherwise appropriated ; and it shall be the duty of the said Secretary to give such instructions to the collectors of the customs in the other collection districts, as he may deem necessary to prevent the importation of adulterated and spurious drugs and medicines.

Sec. 6. And be it further enacted, That the special examiners to be appointed under this act, shall before entering on the discharge of their duties, take and subscribe the oath or affirmation, required by the ninth section of the act of the thirtieth of July, eighteen hundred and forty-six, entitled " An act reducing the duty on imports, and for other purposes."

Sec. 7. And be it further enacted, That the special examiners authorized to be appointed by the fifth section of this act, shall, if suitably-qualified persons can be found, be taken from the officers now employed in the respective collection districts; and if new appointments shall be necessary for want of such persons, then, as soon as it can be done consistently with the efficiency of the service, the officers in said districts shall be reduced, so that the present number of said officers shall not be permanently increased by reason of such new appointments.

Approved June 26, 1848.

Internal Use of Chloroform, its Effects, &c. By H. Hartshorne, M. D., (*Amer. Jour. Med. Sci.*)—When the inhalation of this substance as an anæsthetic began to attract universal attention, we made at the hospital, at Dr. Wood's suggestion, some investigation into its effects when taken internally. Although very sweet, it is so pungent as to require a large proportion of gum water to obtund its effect on the tongue, throat, and even stomach.

Seventy-five drops gave me a sensation of general diminution of consciousness and sensorial capacity. Sight, hearing and touch were all made less impressive, but no feeling of exhilaration or of derangement occurred. Drowsiness was positive. The pulse was not at all accelerated; in fact, it was two beats less in the minute. The same effects followed in two other medical gentlemen from two or three times the quantity. One swallowed a drachm, or over 200 drops. He became very heavy, and after a short interval went into a sound sleep. The effect passed off in all of us after an hour or two. No one felt exhilarated or deranged as by alcohol, and in none was the pulse increased. The conclusion was positive in all our minds that it is a *direct sedative* to the cerebro-nervous system—a sedative narcotic.

A woman who suffered with a most obstinate and painful neuralgic affection of the side and head, took 75 drops at night. She slept better than she had for weeks, even after inhaling ether or chloroform, as she had repeatedly; and was also unusually comfortable the next day. She then continued to take it, in a somewhat larger dose, for two or three weeks, every night; and improved under this more than under any other treatment.

From the pungency of chloroform I was induced to expect carminative powers. Upon trial in a number of cases of flatulent colic, I found it in the dose of 75 drops, sometimes repeated, to give prompt relief. It was then used as a substitute for Dover's powder as a soporific at night in rheumatism; and there answered admirably. There was but one patient, a woman with cancer of the uterus, to whom it was given as an anodyne, who alleged that it disagreed with her, causing headache and sickness of stomach without sleep or relief.

Believing it to be less constipating and more purely sedative than morphia, I tried the addition of it to cough mixtures in place of the latter. But here the objection presents, that so large a quantity of mucilage is required, as to oppress the stomach; or, if given in alcoholic solution, the stimulus of this vehicle might be undesirable. Still, as it is very pleasant to the taste, it might be added in small quantity to such mixtures, lessening the usual amount of opium in them.

It might be worth while to try it by enema in strangulated hernia, as a powerful relaxant to the system generally, and at the same time an excitant of peristaltic action. It is our impression that it is somewhat laxative even when taken by the mouth; but our experiments did not render this certain. There is no doubt, however, that as a purely sedative narcotic and carminative, having the advantage of a sweet, pleasant taste it might often be made a serviceable medicine.

On the Effects of Sub-borate of Soda, (*Annalist.*) By J. C. Hubbard, M. D.—If an aqueous sol. of ℈iss. sub-borate soda is taken at bed-time per anum and retained, the individual receiving it will in a few hours be found laboring under a high degree of venereal excitement. The pulse will be more resisting and the skin hotter than it is in a normal state ; there will be a slight ringing in the ears, a sense of heat, and fulness in the loins. If the subject is an adult male, erection of the penis, an emission of the semen (partly insensible) follows. These conditions will commonly pass off by morning. When double the quantity of sub. bor. soda above mentioned is taken in the same manner, the excitement of the genital organs will be intense, the pulse full and hard, loud ringing in the ears, a sense of fulness, heat and soon after, absolute pain in the cerebellum.* Accompanying these symptoms are pain and heat in the lumbar division of the spine, frequent involuntary discharges of semen, from three to five during a night. With the exception of the emissions, the detailed effects of the last experiment will be exhibited for the following day. These facts prove that the borate of soda can stimulate the sexual arrangement to the last degree, and kindle up an action in the arterial system in a measure independent of venereal orgasm, because it continues many hours after the latter sensations subside. Richter, Hufeland, Kopp and others commend its emmenagogue powers. The last authority says, it is well adapted to cases of obstructed menstruation attended by general plethora and febrile habit of body. How can it be so? Do not its emmenagogue powers grow out of the local excitement it gets up? We have used it several times with prompt success in cases of suppression that defied other remedies. It was preceded by preparatory treatment and given in xv. gr. doses every eight hours.

KREASOTE IN ERYSIPELAS.—Dr. Fahnestock, in a letter to the editor of the American Jour. of Med. Science, extracts from which may be found in the July number of that Journal, says, that during a practice of many years he has been in the habit of using kreasote in erysipelas of the face (as well as on all other parts of the body,) in both its simple and phlegmonous forms, confining local treatment to this article alone. And such has been the success attending its use, says he, that I have yet to witness a case which has not yielded to it. His mode of using it is to apply the pure kreasote by means of a camel's hair brush over the whole of the affected surface, extending it some distance beyond the inflamed part, at the same time administering a dose of calomel followed by a sufficient portion of jalap to secure free catharsis. When the mucous membrane of the mouth and fauces is affected he applies to these parts a strong solution of nitrate of silver, say ʒss. to ʒj. to ℥j. of distilled water. In the phlegmonous form he has found it necessary to repeat the application more frequently than in the simple. A very good mode is to sprinkle the surface of a poultice composed of bread and water and apply nearly cold to the part, or keep cloths wet in a strong solution constantly applied to the part. The kreasote, when applied, should cause the parts to become white immediately. If this does not occur it is not pure. The skin does not become the least marked by its use. Dr. F. says that he was induced to make trial of this remedy by a hint which M. Dupuytren threw out in a small pamphlet in which he supposed it might be a good remedy in this disease.

QUININE—*Effects of, in Inflammatory Affections.*—Dr. Shanks has recently, in the New-Orleans Medical and Surgical Journal, reported two cases of puerperal fever which tend to show that after free depletion by means of the lancet, although pain is present, quinine in large doses combined with morphine may prove beneficial. In the cases related when the system was brought so fully under the influence of the quinine as to diminish the general nervous sensibility, which was evinced by the relief of pain and the insensibility to sound, profuse and continued perspiration was produced, more like the perspiration produced by the full influence of tartarized antimony than any thing else. To this sedative and sudorific effect of large doses of quinine is its curative influence to be attributed in cases of extensive inflammation of serous membranes; for by its influence, used in that way, vascular action, produced by general nervous excitement from local irritation or inflammation, after sufficient abstraction of blood may not only be controlled, but its cause removed and its effects relieved, by its influence in subduing morbid excitability—equalizing the circulation—producing copious perspiration, and thus relieving the congestion and inflammation of the interior serous membrane and other viscera, and preventing their consequences—adhesion, effusion, suppuration, &c. In speaking of its further application to the treatment of inflammatory affections, Dr. S. remarks:

---

* Where the phrenologists locate their organ of amativeness.

> In further illustration of the result of many years' careful observation and experience of the effects of large doses of quinine, so repeated as to produce, and keep up for a time, a decided impression, it is proper to state, that it can only be used in that way with safety and benefit, in cases where there is considerable vigor of constitution, and more than the normal state of vascular excitement, at the time of its employment, or expected to occur by the time the system is impressed by its febrifuge influence. If this condition of the system does not exist, and especially if it be much weakened by previous disease, quinine given in large doses may so overwhelm the nervous system as to place the whole organism below the point of healthy or curative functional action.
>
> Under these circumstances, and in conditions of the system not tolerating its use in large doses, I have seen cases when the frequent, small and feeble pulse, the cold extremities, the relaxed skin, the profuse perspiration, and all the symptoms indicating collapse, and a fatal giving way of the vital powers, were doubtless, hastened, if not positively produced by the injudicious employment of large doses of quinine; and death resulted from its depressing and poisonous influence having been carried beyond the point for healthful re-action.

SULPHATE OF QUININE—*Remarks upon the Action of.*—Dr. William A. Booth, in the New-Orleans Med. & Surg. Jour. for July, after detailing a number of cases which tend, in his opinion, to establish the true action of this remedy, says that quinine occupies a middle ground between stimulants and tonics. It is more speedy in its operation, and evanescent in its effects, than the medicines usually classed under the head of "tonics." It is less so than those usually classed as "stimulants"—it also possesses astringent qualities. The correctness of this assumption is confirmed by its taste and by its effects when taken internally. When the secretory system is performing its functions properly, who has not seen the tongue and fauces become dry under its use? These effects, remarks Dr. B., arise in part from its astringency, and teach the propriety and frequent necessity of preceding it by, or combining it with, mercury. "The astringency of quinine is sometimes directed to the kidneys, with such force as to cause suppression of urine." Dr. B. "considers it a nervous tonic," and believes it to possess great anti-periodic powers, and that this power depends upon its *anti-congestive* property, and this property to be the result of *a tonic action* upon the nervous system. Quinine has no tendency to excite or regulate the secretions, and its direct power over the circulatory system is excessively limited. In closing his paper on the action of quinine, Dr. Booth remarks:

> As an anti-periodic, I deem it applicable to all affections characterized by periodicity, regardless of their name, location or supposed nature.
>
> As an anti-congestive it is applicable to all cases of *acute* congestion. I means to describe by the word "acute," those cases in which the congestion appears suddenly, or admits of or requires speedy relief. The quinine to precede, accompany or follow depleting, mercurial or other remedies, according to the time allowed and the condition of the patient. When it is admissible, the last is the most judicious course.
>
> The anti-periodic and anti-congestive powers of quinine being mere results of a tonic or stimulant property, I esteem it an appropriate remedy in debility. As, however, it is a tonic or stimulant *sui generis*, acting with less rapidity than the last, and less permanency than the first class, common sense would suggest that medicines plainly belonging to one or the other of these classes should be selected, where rapidity of stimulation or permanency of effect is desirable.
>
> The astringency of quinine and the fact that it sometimes acts as a local irritant add weight to these considerations.

—

SMART-WEED.—*A Remedy for Mercurial Salivation and Aphthous Stomatitis.*—DR. WILCOX, in the American Jour. Med. Sci. for July, communicates his observations on the use of a decoction of the leaves of this article as a remedy. He was first induced to give it a trial from the fact that farriers employ it with success for the cure of that disease of the salivary glands of the horse, called slabbering. In speaking of the success attending its use, he says: "I have now employed it in about twenty cases of mild mercurial salivation, and have uniformly procured the same prompt and complete relief. I have tried its use in two of the severer forms, attended with numerous and deep ulcerations; these cases were made much more comfortable, but not cured. The benefit I derived from it in salivation, induced me to make trial of it in the follicular stomatitis of nurses, which appears to be endemical to the Valley of the Chemung River. Within the last three years I have prescribed its use in ten cases, and without an exception, they have been speedily and entirely relieved. I am not prepared to state what can be accomplished with it in those cases of aphthous stomatitis connected with a tuberculous state of the constitution, having yet had no such case; neither have I used it where the ulcerations were deep; in such cases other remedies will doubtless be more effective. My mode of using it, is to take about an ounce of the dried leaves and tops, water one pint; boil twenty minutes and strain. The mouth is washed with it every hour through the day."

—

STYLLINGIA SYLVATICA, *Queen's Delight.*—Dr. F. Y. Simons, (*Charleston Med. Jour. and Rev. for May,*) claims to have been the first medical practitioner who fully tested the medical virtues of this plant. His observations were published in the American Medical Recorder, Vol. XIII., 1828. The plant is indigenous to the state of South Carolina, and grows so luxuriantly that it might become an article of commerce. Dr. S. believes that it is likely in a great degree, to supersede Sarsaparilla, or, at least, become a powerful adjuvant. It is not mentioned in any of the dispensatories or pharmacopœias of the day—the part which he recommends and uses in medicine, is the root, which may be given in decoction, tincture or powder. In speaking of the use and mode of preparation of these several forms, Dr. Simons gives the following formulæ.

> *Decoction.*—To about four ounces of the Sylvatica cut up into small pieces, two-thirds of a pint of water is poured, it is put on a slow fire, the vessel covered, and allowed to simmer down to half a pint. The slower the boiling, the stronger and more efficacious the decoction. At first, half a wine-glassful is given every three hours, increasing or lessening the dose, according as the stomach can bear it. In some cases, it is given morning, mid-day and night; say a wine-glassful, increasing as much as the stomach will conveniently bear, until the half pint is taken during the day. This plan, although troublesome, wherever the root can be obtained easily, is a good method of prescribing it.
>
> *Tincture.*—To about four ounces of the root cut up, a pint of alcohol is poured; it is every now and then shaken; suffered to remain until the active principle is well extracted—when it is poured off and used. The dose is from a half to a tea-spoonful two or three times a day, to be increased if necessary. The taste of the tincture is harsh, rather styptic and mucilaginous. It smells very much like laudanum. This is a very good method of exhibiting it.
>
> *Powder.*—I have never used this myself, but fifteen to thirty grains is about the average dose.
>
> The Styllingia Sylvatica, given in the manner above described, I regard as, at least, one of the most powerful and valuable vegetable alteratives which we know of; and forms an admirable substitute for mercury, when that medicine would be inadmissible—such, for instance, as secondary syphilis more particularly. In all cases where an alterative is required, it will be found useful singly, or associated with other medicines.
>
> In large doses, it acts as a powerful emetic and purgative, and an efficient one too; although by no means equal to tartar.

He has used the above and following formulæ for upwards of twenty years, and has found it the best vegetable alterative, separate or combined with sarsaparilla; especially when mercury is inadmissible, or to counteract the ill effects of it.

> 1. ℞.—Syrup of Sarsaparilla, - - ℥xvj.
> Tinct. of Styllingia, - - ℥iv.
>
> A table-spoon or ½ an ounce a dose—three or four times a day.
>
> 2. ℞.—Tinct. of Styllingia,
> Tinct. of Jalap,
> Tinct. Aromatic of Senna, each - ℥j.
>
> Take a table-spoon three or four times a day, increased or diminished according to the nausea and purgative effects.
>
> Again, a decoction of Styllingia, combined with sarsaparilla, guaiac., liquorice root, &c., &c., will make an excellent alterative and diet drink.
>
> In all the preparations, it is important to ascertain if the plant has lost any of its properties, or rather the root of the plant which is used; the peculiarities of which, I have already stated. Like sarsaparilla, and other vegetable medicines, if not in good condition, it will be inert.
>
> The extract of Styllingia, in five grain doses, is a good substitute for blue pill, where the individual is susceptible of salivation.

MISCELLANEA.

Anatomical Peculiarity. By R. Campbell, M. D., (*Southern Med. & Surg. Jour.*)—Not finding it recorded in any anatomical work we have examined, we deem the following coincidence worthy of notice:

The direction of the canals for the passage of the nutritious vessels into the long-bones of the extremities varies in the *erect position* of the body, thus—

Humeri, Tibiæ, Fibulæ	Obliquely downwards.	Ulnæ, Radii, Femora,	Obliquely upwards.

Now when the limbs assume a position *corresponding with that of the fœtus in utero*—(admitting the head to be up)—viz: the forearms flexed upon the arms, the arms upon the chest, the thighs upon the abdomen and the legs upon the thighs, the canals will *all* be found to pursue a course *directly downwards.*

The entrances to these canals are generally situated about the centre of the bone, or at the junction of the upper and middle thirds of the shaft. The location may vary slightly, but their direction is always the same; to ascertain which, we have examined all the bones within our reach.

Perhaps this may prove to students a useful formula, for impressing upon the memory the situation and direction of these canals.

Code of Ethics of the Philadelphia College of Pharmacy.—Pharmacy being a profession which demands knowledge, skill and integrity on the part of those engaged in it, and being associated with the medical profession in the responsible duties of preserving the public health, and dispensing the useful though often dangerous agents adapted to the cure of disease, its members should be united on some general principles to be observed in their several relations to each other, to the medical profession, and to the public.

The *Philadelphia College of Pharmacy* being a permanent, incorporated institution, embracing amongst its members a large number of respectable and well-educated apothecaries, has erected a standard of scientific attainments, which there is a growing disposition on the part of candidates for the profession to reach; and being desirous, that in relation to professional conduct and probity, there should be a corresponding disposition to advance, its members have agreed upon the following principles for the government of their conduct:

1st. *The College of Physicians of Philadelphia* having declared that any connection with, or moneyed interest in apothecaries' stores, on the part of physicians should be discountenanced; *we, in like manner, consider* that an apothecary being engaged in furthering the interests of any particular physician, to the prejudice of other reputable members of the medical profession, or allowing any physician a percentage or commission on his prescriptions, is unjust toward that profession and injurious to the public.

2d. As the diagnosis and treatment of disease belongs to the province of a distinct profession, and as a pharmaceutical education does not qualify the graduate for these responsible offices, we should, where it is practicable, refer applicants for medical aid to a regular physician.

3d. As the practice of Pharmacy can only become uniform, by an open and candid intercourse being kept up between apothecaries, which will lead them to discountenance the use of secret formulæ, and promote the general use and knowledge of good practice, and as this College considers that any discovery which is useful in alleviating human suffering, or in restoring the diseased to health, should be made public for the good of humanity, and the general advancement of the healing art,—no member of this College should originate or prepare a medicine, the composition of which is concealed from other members, or from regular physicians.

Whilst the College does not at present feel authorized to require its members to abandon the sale of secret or quack medicines, they earnestly recommend the propriety of discouraging their employment when called upon for an opinion as to their merits.

4th. The apothecary should be remunerated by the public for his knowledge and skill, and in his charges should be regulated by the time consumed in preparation, as well as by the value of the article sold; although location and other circumstances necessarily affect the rate of charges at different establishments, no apothecary should intentionally undersell his neighbors with a view to their injury.

5th. As medical men occasionally commit errors in the phraseology of their prescriptions, which may or may not involve ill consequences to the patient if dispensed, and be injurious to the character of the practitioner, it is held to be the duty of the apothecary, in such cases, to have the corrections made, if possible, without the knowledge of the patient, so that the physician may be screened from censure. When the errors are of such a character as not to be apparent, without the knowledge of circumstances beyond the reach of the apothecary, we hold him to be blameless in case of all consequences, the prescription being his guarantee, the original of which should always be retained by the apothecary.

6th. Apothecaries are likewise liable to commit errors in compounding prescriptions,—*first*, from the imperfect handwriting of the physician; *secondly*, owing to the various synonyms of drugs in use, and their imperfect abbreviation; *thirdly*, from the confusion which even in the best regulated establishments may sometimes occur, arising from press of business; and *fourthly*, from deficient knowledge or ability of one or more of the assistants in the shop, or of the proprietor.

We hold that in the first three instances named, it is the duty of the physician to stand between the apothecary and the patient, as far as possible; and in the last that he should be governed by the circumstances of the case—drawing a distinction between an error made by a younger assistant accidentally engaged, and a case of culpable ignorance or carelessness in the superior.

7th. As the apothecary should be able to distinguish between good and bad drugs, in most cases, and as the substitution of a weak or inert drug for an active one, may, negatively, be productive of serious consequence—we hold that the intentional sale of impure drugs or medicines, from motives of competition, or desire of gain, when pure articles of the same kind may be obtained, is *highly culpable*, and that it is the duty of every honest apothecary or druggist to expose all such fraudulent acts as may come to his knowledge. But in reference to those drugs which cannot be obtained in a state of purity, he should, as occasion offers, keep physicians informed of their quality, that they may be governed accordingly.

8th. As there are many powerful substances that rank as poisons, which are constantly kept by apothecaries, and prescribed by physicians, and which are only safe in their hands, as arsenious acid, vegetable alkaloids, ergot, cantharides, etc.—we hold that the apothecary is not justified in vending these powerful agents indiscriminately, to persons unqualified to administer them, and that a prescription should always be required, except in those cases when the poisons are intended for the destruction of animals or vermin—and in these instances only with the guarantee of a responsible person. And we hold that when there is good reason to believe that the purchaser is habitually using opiates or stimulants to excess, every conscientious apothecary should discourage such a practice.

9th. No apprentice to the business of apothecary should be taken for a less term than four years, unless he has already served a portion of that time in an establishment of good character. Apprentices should invariably be entered as matriculants in the school of pharmacy, and commence attendance on its lectures at least two years before the expiration of their term of apprenticeship; and as the progress of our profession in the scale of scientific attainment must depend mainly upon those who are yet to enter it—it is recommended that those applicants who have had the advantage of a good preliminary education, including the Latin language, should be preferred.

—

TYING THE INTERNAL ILIAC.—By the Boston Medical and Surgical Journal for Oct. 11th, we learn that Dr. H. J. Bigelow, of the Mass. General Hospital, has recently tied the " internal iliac," for what was supposed to be false aneurism of the gluteal artery. The patient at the time was under the influence of ether, no interruptions occurred, and only a small quantity of blood flowed. According to a late report of the case, some peritoneal inflammation existed. Since then, (the same journal continues) we have not heard, but fully expect a satisfactory result.

—

THE ANNIVERSARY DINNER of the Society for the Relief of Widows and Orphans of Medical Men, will take place on Monday, November 13th, at the *Astor House.* Price of tickets, $3 00.

STEWARDS.

ABRAM DU BOIS, EDWARD L. BEADLE,
JAS. R. WOOD, WM. ROCKWELL,
JOHN G. ADAMS, JOHN T. METCALFE.
SAML. T. HUBBARD.

PART FOURTH.

FOREIGN MEDICAL RETROSPECT.

ANATOMY AND PHYSIOLOGY.

On the Blood-Vessels of the Nerves of the Heart. By Joseph Swan, F. R. C. S., &c. (*Lond. Med. Gaz.*)—The superficial blood-vessels placed just underneath the pericardium, and the interspersed fat, have not been noticed, especially with respect to their very interesting arrangement in relation to the nerves.

Many years ago, I injected with quicksilver numerous transparent vessels running in lines on the surface of the heart of a calf a few days old: and lately I have examined the nerves of the heart of an ox, which weighed rather more than five pounds and a half, and as the auricles were quite open, it was drained of nearly all its blood. On the surface the numerous nerves were plainly seen like white lines as far as the fat was absent; on the surface of these white lines there was a transparent fainter line, which I believed to be a vessel, but from its emptiness I could not well determine its nature: on removing the pericardium and exposing some of those white lines, I found them as flat as the retina; but on tracing them upwards they became less broad, and appeared much smaller, especially near their connections with the trunk or plexus from which they proceeded. On tracing one of these lines upwards from the apex, I did not find it a single chord; but when it advanced more to the base of the heart, it divided and sent one of its portions deep, some part of which appeared to communicate with a deep artery and another part to rise to the surface amongst the fat, which from the ultimate transparency and situation, I believed to be composed, either of veins or absorbents. As I felt dissatisfied about the nature of the white lines on the preceding heart, I procured another as large, but had a portion of each lung left attached to it, by which means the blood was kept in the vessels: on examining the surface, I saw the coronary arteries and veins, and the white lines crossing them obliquely, as described by Scarpa; but they were accompanied by vessels of the size of thick hairs, filled with blood, one on each side; although these appeared as veins, I believe there is also an artery and absorbent. The whole surface of the heart was covered with similar vessels filled with blood.

The trunks of the cardiac nerves of the ox are very small in proportion to the weight of the parts they supply; their branches also appear remarkably small before they are joined by their respective arteries, and in fact, their continuations in the white lines on the surface of the heart, do not contain near the quantity of nervous matter represented by some anatomists.

The arteries of the nerves are of large size in proportion to the quantity of nervous matter the nerves contain. Some branches of the nerves travel a considerable distance obliquely before they accompany or embrace an artery; previously, some of these nerves have not any visible artery. In some instances, a larger nerve joins a proportionate artery, and both divide equally, being continued as the separate white lines or nerves on the surface of the heart. The artery of a nerve, in descending, forms some transverse connections with that of contiguous ones, and with several subjacent arteries. I have not succeeded in filling with injection the arteries throughout the nerves; nevertheless, it may be fairly concluded that the arteries are continued to the termination of the nerves, as vessels can be discovered on them for some days, especially after the heart has been immersed in water; and as the lateral veins can be distinctly traced, filled with blood, to the end of every nerve on the surface of the heart; and they are purposely arranged at the side of the nerve for returning its blood.

The lateral vessels on each side of the nerve are the veins, which have numerous transverse branches for communicating with those of the adjoining nerves. They empty themselves into large venous trunks at different places. I have injected several of these lateral vessels, and their transverse branches, with quicksilver. There is some difficulty in injecting them as well as the arteries, as all the muscular branches require to be filled before the injection passes freely into them.

In the moist state the artery may continue distinctly visible for some days, whilst the veins become empty and disappear. In the dried state, on the contrary, the arteries generally disappear, although in some instances a central mark may be observed; but the veins remain apparent from the contained blood, and form, as it were, a distinct skeleton of the nerve.

In the moist state the empty veins appear as part of the nerve; and their transverse branches, by joining together the adjacent nerves, may be easily mistaken for nervous connections or communications.

As the artery and veins form part of the bulk of the nerve, they may add more or less to its size, according to the nature of the fluid in which the organ is preserved; also according to the manner in which they are observed: so that they may appear larger by imbibition whilst contained in the fluid, and smaller by their emptiness when exposed to the air. As putrefaction has advanced, the nerves have appeared smaller; whilst marks, as of carbonaceous matter, have been found about them, and were probably derived from the veins.

The uses of these vessels are for supplying the nerves with blood, and allowing an easy return of it during the action of the heart. The uses of the other parts of the superficial plexus placed just underneath the pericardium, are for supplying the fat, the pericardium and the secretions.

There is an especial analogy of arrangement, and not improbably of some functional power, between the ciliary nerves and arteries, independently of the retina, and those of the heart. Both are affected in a somewhat similar manner in the passions; from sympathy with other organs, and from a deficiency of blood. The small arteries for the nerves may be influenced momentarily with the nerves from mental emotion or bodily disorder: the vital stimulus their blood affords may be thus withheld from the nerves, and fainting or instant death be produced, especially when the heart has been impoverished by the diminution of the calibre or activity of the coronary arteries, through the ossification or thickening of their coats.

On the Composition of the Splenic and Portal Blood. By M. J. Béclard.—In a memoir lately presented to the Parisian Academy of Sciences, on the functions of the spleen and liver, the contents of which are based upon the results of comparative analyses of the blood of the splenic and portal veins, M. J. Béclard observes that his analyses of arterial blood confirm the opinion generally entertained, that, from whatever part of the arterial system it is taken, its composition is invariably the same. Arterial blood comes from one organ, viz. the lungs, passes through one organ, the heart, and is then distributed to all parts of the body. Venous blood, on the contrary, is derived from every organ of the body; consequently has sources as numerous as the organs themselves, and may be supposed to present certain differences in composition from whichever organ it is examined. With regard to the differences between arterial and venous blood generally, M. Béclard states, that, having in a series of experiments compared the blood of the carotid artery with that of the jugular and crural veins, he found a diminution of corpuscles and a slight increase of fibrine in the venous blood.

The spleen resembles a gland in many respects, but differs in having no excretory duct: hence it is necessary to examine the blood for an explanation of its use. The results of thirty-two experiments, in which blood was drawn from the splenic and from the jugular veins in living animals, and a comparative analysis made of the fluid from both these sources, showed that the blood returning from the spleen invariably contains fewer corpuscles, more albumen, and rather more fibrin, than the blood in the jugular vein: hence the opinion that the spleen is the organ for the formation of blood-corpuscles is no longer tenable: it seems rather to be the site of their destruction.

Since the trunk of the portal vein is formed by the junction of the splenic with the superior mesenteric, it appeared to M. Béclard that, to obtain a correct analysis of the portal blood, the contents of the superior mesenteric should be examined previous to this vein being joined by the splenic; for the blood in the portal vein itself will be mingled with that from the spleen. From many examinations of the blood of the superior mesenteric, he finds that, as a rule, the quantity of its albumen is considerably increased during the early period of digestive absorption, while in the latter periods of this absorption the quantity of corpuscles is greatly increased. He did not find that the proportion of fatty matter was ever greater in the blood of the superior mesenteric vein than in that of the rest of the venous system—an observation which makes it probable that nearly all the fatty matter removed from the contents of the intestinal canal is taken up by the lacteals, and very little, if any, by the blood-vessels.—*Lond. Med. Gaz. from Comptes Rendus*, 1848.

—

On the Elastic and Contractile Tissue of Arteries, (*Baly and Kirkes' Supplement to Müller's Physiology.*)—The statement made by Professor Müller, that the middle coat of arteries does not possess any muscular contractility, requires to be somewhat modified, principally on account of the investigations of Henle, which have shown that, besides elastic tissue, the middle arterial coat is provided with fibres in all respects analogous to those of organic muscle.

This discovery is one of considerable importance, because it serves to explain what was hitherto unintelligible, the well-known property possessed by arteries, especially by the smaller ones, of contracting, under certain circumstances, to a diameter smaller than that which their elasticity alone could enable them to assume. Although this property has been matter of almost universal observation, yet by few writers has any plausible explanation of it been suggested. The sagacity of John Hunter, unaided by microscopic evidence, led him to conclude that the contraction of arteries was really a muscular act. Yet this opinion appears to have been lost sight of, for most writers since Hunter's time, including Professor Müller, have attributed the contraction of the arterial coats to a peculiar vital property, to which they gave the name of *tonicity*, or insensible contractility, without being able to refer this property to any definite structure. In the last German edition of the first volume of his work, Professor Müller alludes to the discovery by Henle, and considers it probable that the fibres described by him are the seat of the contractile power of the arteries, though he appears disinclined to admit their muscular nature.

Chemical evidence, also, in favor of Henle's account, has been procured by Dr. Retzius, who finds that a solution of the arterial coat in acetic acid is precipitated by cyanide of potassium; this shows that some elements besides cellular and elastic tissues enter into its composition, for the solution in acetic acid of neither of these tissues is precipitated by cyanide of potassium: and that organic muscular fibre constitutes one of the other elements has since been rendered tolerably certain by Dr. F. C. Donders, who, by acting upon the middle arterial coat of a young sheep with a solution of potash, observed that in two or three hours the fibres of the coat separated from each other, became granular, and then dissolved,—changes exactly similar to those which he found organic muscular fibres, under like circumstances, to undergo. The existence of muscular fibres in the middle arterial coat is also inferred by the same physiologist from the effects produced upon it by the action of nitric acid and ammonia. When strong nitric acid is applied to a proteine compound, it forms with it what is termed xanthoproteinic acid, which, with ammonia, produces a yellow xanthroproteinate of ammonia. On applying this test with the requisite caution to the coats of blood-vessels, Dr. Donders found that the middle arterial coat alone assumed the characteristic yellow color. The other coats, as well as the coats of veins, remained unchanged in color. But the most satisfactory evidence is that furnished by some recent experiments of Ed. and E. H. Weber, in which they applied the stimulus of electro-magnetism to small arteries. One principal circumstance which induced Professor Müller to deny the muscularity of arteries was the inability of himself and of other experimenters who had occupied themselves on the subject to produce the slightest movements in arteries by means of galvanic and electric stimuli, while in all true muscular tissues the stimuli give rise to manifest contractions. An explanation of the failure of these physiologists may be found in the circumstance that in nearly all their experiments the arteries examined were of large size, such as the aorta and the carotids, in which the thickness of the muscular coat is comparatively small. The experiments of the Webers were, on the other-hand, performed on the small mesenteric arteries of frogs; and the most striking results were obtained, when the diameter of the vessels examined did not exceed from one-seventh to one-seventeenth of a Paris line. When a vessel of this size was exposed to the electric stream, its diameter in from five to ten seconds became one-third less, and the area of its section about one-half. On continuing the stimulus, the narrowing gradually increased, until the caliber of the tube became from three to six times smaller than it was at first, so that only a single row of blood corpuscles could pass along it at once; and eventually the vesssel became completely closed, and the current of blood arrested. When the experiment was so conducted that only a limited part of an artery was exposed to the electric stream, the extent of tube involved in the contraction was equally limited, not exceeding from one-eighth of a line to a line. The contraction did not ensue the moment the irritation was applied, and it continued for a short time after its withdrawal. The walls of the artery were rendered somewhat thicker at the contracted part, but the narrowing of the canal was proportionally greater than the increase in thickness acquired by the walls. Previous to the complete closure of the artery, the velocity of the stream of blood passing through it, in accordance with hydraulic principles, became considerably accelerated. When an artery was irritated only for a short time, or by a feeble galvanic current, it speedily resumed its former caliber on the stimulus being withdrawn, and again contracted on a re-application of it; but when the irritation was long-continued, or the stream very powerful, the portion of the artery narrowed by it lost the power of again contracting, and even dilated until it became double its former size, forming a kind of aneurism on the trunk of the vessel. When the abdominal aorta and other large arteries were experimented on in the above manner, no decided appearance of contraction ensued, a result agreeing with the observations of the experimenters before alluded to. The electric current produced no contraction of the capillaries, and only a slight one of the small mesenteric veins. One other remarkable circumstance observed in the Webers' experiments may, though out of place, be here mentioned, on account of its novelty and importance; and that is, the speedy arrest and subsequent coagulation of the blood in the vessels, especially the capillaries, exposed to the influence of the electro-magnetic stream. The blood corpuscles adhered unusually to each other and to the walls of the vessels, and by the greater amount of friction thus produced they became retarded in their onward movement, and eventually arrested.

PATHOLOGY AND PRACTICAL MEDICINE.

Scirrhus of the Pancreas. By Dr. Lees, (*Proceedings of the Dublin Path. Soc. in Dub. Jour. of Med. Sci.*)—A man, aged 65, was admitted into Meath Hospital, in a moribund condition—laboring under jaundice—skin of a yellowish green hue, he complained of pain in the right hypochrondriac and epigrastic regions, where a general enlargement was observed extending as low as the umbilicus, slightly tender to the touch; vomiting and hiccough were present, and the bowels were constipated; there was no ascites or pain in the shoulder. The patient had not been addicted to drinking—but had supposed himself, for the last six months, the subject of dyspepsia, jaundice had existed three weeks, and soon after the pain set in, in the side. The patient died soon after his admission into the hospital. *Autopsy*, the liver was greatly increased in size and contained an isolated scirrhous tubercle, the gall-bladder was enormously distended, so much as to extend into the right lumbar region in front of the kidney. The head of the pancreas was greatly enlarged and converted into a scirrhous mass; it was intimately united to the concavity of the duodenum. The common duct was very much dilated. During the whole period of his illness there was no appearance of salivation; this is a point worthy of observation, as the occurrence of profuse salivation has been laid down as characteristic of disease of the pancreas.

Contagious Nature of Porrigo Capitis. By Dr. Nelligan, (*Dublin Jour. of Med. Sci.*—Porrigo capitis is a contagious disease, the vegetable being propagated by the *mycelia.* Its contagious character has been denied by many, on the ground of the rarity of the disease, and the failure to produce it by inoculation, as tried by Gruby and others; the former of whom only produced the disease once out of seventy-six trials on vegetables, and not at all on animals. But Remak succeeded in inoculating his own arm in August, 1842; and Bennett, who had previously failed in his own person after repeated trials, succeeded completely in 1845, in producing the disease in one of his class by inoculation and close contact of the favous crusts, obtained from the head of a boy at that time in the Royal Infirmary. An account of his experiment, and also of Remak's, will be found in the Northern Journal of Medicine for September, 1845, p. 202. Now in all these trials to generate the plant, one important fact connected with the natural history of parasitical fungi has been overlooked by all, namely, *that they require for their growth a peculiar soil;* thus we find one genus is only found on snow, another on cheese, another on yest, different decaying vegetable matters, and individual genera and species on various living animals and plants; nay, even different sorts on different parts of the same animal. This holds true with the Achorion Schonleinii; it requires for its reproduction to be planted in a peculiar soil, that is, on an individual whose system is in a peculiar cachectic condition; and until it is ascertained what this exact constitution is, a single instance of its propagation by contact—and such instances are not uncommon—must be held as sufficient proof of its contagious character.

On the Use of Solution of Caustic Potash in relieving Strangury. By R. Mulock, M. D.—In three cases of strangury, caused by blistering with cantharides, I found the solution of caustic potash a perfect remedy. Two of the cases were head affections, where opium was inadmissible. Thirty drops, given in half a wine-glass of water every hour, gave relief before the third dose was exhibited. What led me to the use of this preparation was its known effects in relieving irritation of the bladder in other cases, and also its efficacy in relieving the stings of wasps or bees when applied to the skin. I considered that it might also relieve the acrid principle of the cantharides. Indeed from its effects, it would probably be a remedy for an overdose of that medicine, if given in proper time. In looking over the various works on irritative poisons, I find no antidote to the poison of cantharides, and mention this now that further trial may be made of its effects in giving relief.—*Dub. Jour. Med. Sci.*

Pathology of Intermittent Diseases.—Dr. Amand Beaupoil has just published in the *Gazette Medicalé,* an extremely interesting paper, wherein is treated the disputed question of the localization of intermittent fever. It would give us pleasure to analyze this dissertation fully, for it is worthy of notice, but we are obliged, for want of space, to confine ourselves to the conclusions:—1. The seat of the intermittent phenomena cannot be placed in any organ or system of organs to the exclusion of others. 2. The intermittent may become connected with any other affection, and form with it a sort of unity or special morbid entity; the disulphate of quinine is a specific for this compound intermittence, as well as for simple ague. 3. Intermittence is often combined with an organic affection, in the manner of complication; it behooves us then, to administer the specific remedy simultaneously with the means indicated by the organic lesion. The treatment ought, in fact, to be double. 4. When the intermittence is independent of any organo-pathological modification, it seems to affect the sensitive portion of the nervous system especially; there appears to be an exaggeration of the physiological rhythm of organic contraction and expansion, and this state produces an alteration in the amount and variations of animal heat, and constitutes intermittent fever. 5. It will, then, be seen that ague may be simple, compound or complicated. 6. The intermittent phenomena may be attributed to the effect of miasmata on the economy; the noxious emanations being modified by periodic alternations of heat and cold, of dryness and humidity, of light and darkness, of sleep and waking, and of all influences which act in the same way. 7. The nervous element evidently plays an important part in the production of intermittence, brought on by the causes just mentioned; it seems, indeed, that the influence of this nervous element is altogether indispensable. 8. Enlargement of the spleen is the *effect*, and not the *cause*, of intermittent fever; it is an indication for large doses of quinine.—*Lancet.*

On the Internal Use of Turpentine Oil in Cases of Hemorrhage. By L. Percy, M. D. (*Lon. Med. Gaz.*)—The author, after noticing the fact that several writers—Adair, Nichol, Johnson, Warneck, Copland, Ashwell, and Pereira—have spoken of the efficacy of the essential oil of turpentine in hemorrhagic diseases, observes that this remedy seems nevertheless to be little used by practitioners. In the cases in which he first made trial of it, hæmaturia of two years' standing, in an old man of eighty, was stopped in twenty-four hours by eight drops of oil of turpentine, and did not return. He has since used it in different cases of hemorrhage, and always with a favorable result. The cases in which its use is indicated are those of passive hemorrhage. It must not be employed in cases where there is an active determination of blood, and where the pulse is full. When the discharge of blood is the consequence of organic disease, as of disease of the uterus, or of tubercular disease of the lungs, the action of the remedy is not so efficacious; but the author has seen a case of scirrhus of the womb, in which the hemorrhage was for some time stopped by this remedy. The author has found the action of turpentine oil very rapid, an effect being manifest in a few hours, often after one small dose. In order better to ascertain its power, he used it alone, without having recourse to local astringents or cold applications, where he could do so without fear of endangering the life of the patient. He has used it most frequently in cases of menorrhagia and epistaxis; but he mentions, that it appears to him to be particularly applicable in the cases of hemorrhage attending typhus. He noticed the fact that turpentine exerts different actions on the body according as it is taken in large or small doses, being more readily absorbed in the latter case; and he remarks, that as its beneficial action in cases of hemorrhage must depend on its being absorbed, the inference would be drawn, that the doses in which it is given in such cases ought to be small. His experience confirms this conclusion. He has always found a dose of from eight to thirty drops sufficient. The best vehicle for it is almond emulsion, with a little gum arabic. When there is pain in the abdomen, a few drops of laudanum may be added.

On the Diagnostic Value of Expectoration and Pain in Pulmonary Affections. By Prof. Andral.—Let us now inquire into the diagnostic value of expectoration in various maladies.

In acute laryngitis, simple or puriform, mucus may be rejected: when a certain quantity of pus is suddenly thrown up, it points to a submucous abscess of the larynx; false membranes secreted in the larynx may also be seen, as in variola, for instance. In chronic laryngitis, blood, expectorated in small quantities, indicates an ulcer of the mucous membrane; if the amount of blood be at all considerable, its source is not in the larynx. A chronic form of croup has been described in which the patients cough up false membranes, and this circumstance often exercises a most favorable influence upon the progress of the malady. Polypous concretions, and vegetations formed in the laryngeal cavity, have been rejected; also pus from an abscess developed in the organ, as in a case published by Dr. Pravaz, of Lille: a tumor, soft and fluctuating, had been previously recognised by the introduction of the finger, and disappeared after the sudden expectoration of a certain quantity of purulent matter, with which two small concretions were also thrown up. The same author relates in his inaugural thesis a case in which two hydatids were found in the ventricles of the larynx, but we have never ourselves observed any instance of the kind.

Acute bronchitis is not in its first period attended with expectoration; but, as the disease progresses, the cough becomes loose; and a colorless, transparent mucus, more or less viscid in its nature, is rejected, occasionally streaked with blood if the cough be violent. This matter gradually becomes less transparent, and acquires a puriform appearance, decreasing at the same time in abundance, in proportion as the case progresses towards a favorable termination. In some patients the expectoration is puriform from the first, in others it never assumes that character. Occasionally, even the cough is dry from the beginning to the end of the disease. In chronic bronchitis, the expectoration usually consists of a slimy fluid, more or less puriform in appearance: when dyspnœa is present, this matter is very viscid, and generally spumous. It is sometimes constituted by a homogeneous liquid, which bears the greatest resemblance to the expectoration in consumption, from which neither chemistry nor the microscope can distinguish it. The abundance of the rejected fluids may be very considerable, particularly in the aged, the general condition of the system suffering at the same time much less than it would, *à priori*, seem rational to suppose. The odor of the matter is not characteristic, and may accidentally acquire great fetidity. In some cases of chronic inflammation of the bronchi, no expectoration is observed; in others a peculiarly granular mucus is thrown up, which has a remarkable tendency to solidity; and in both these cases, pulmonary emphysema often follows bronchitis.

During the first two days of pneumonia, characteristic expectoration is seldom noticed, but after this period the rejected matter is viscid, transparent, spumous, and rusty in color; as the disease advances the fluid becomes darker and less frothy, and gradually resumes its natural hue if the malady terminate favorably; if, on the contrary, it becomes darker and more viscid, or brown and more fluid, the prognosis acquires greater gravity. It has been often said that where the color of the expectoration resembled that of the juice of stewed prunes, the circumstance indicated diffused suppuration of the lung; we believe that it points more to increased severity of the case than to that particular fact. In the aged, the expectoration is often of a reddish gray, and may completely be suspended some time before a fatal issue, either from a real cessation of the morbid secretion, or more frequently from loss of power to reject it. In the pneumonia of children no expectoration takes place, and when this disease is a complication of other ailments, consumption for instance, the rejected matter is often deprived of its characteristic appearances. M. Remak, of Berlin, states ("Archives," January, 1846,) that in the expectoration of pneumonia, small concretions are rejected, constituted by fibrine, and incarcerating purulent corpuscles in their network; the shape of these concretions is the same as that of the bronchi: we have several times assured ourselves of the accuracy of this observation, which may assist considerably the diagnosis of doubtful cases. Chronic pneumonia presents no special expectoration.

Œdema pulmonis and emphysema are not attended with any characteristic appearances in this respect. At the beginning of attacks of asthma, the expectoration is usually suppressed, and returns at the close of the paroxysms. Pulmonary apoplexy usually causes hemorrhage and the rejection of a small quantity of blood, but not constantly. In gangrene of the lung, the sputa are thin, dark, and extremely fetid.

Pulmonary consumption at its various periods occasions an expectoration, the characters of which it is important to be well acquainted with. Mucus, pus, blood, concretions, &c., may be rejected, and their relative significations should be clearly understood. During the first period of phthisis, the cough is frequently dry, or followed merely by the expulsion of pure mucus; blood is often rejected at this period, with the characters which we have elsewhere described. Calculi, also, may be expectorated, formed of crude tubercular matter. When softening occurs, the appearances are usually those observed in bronchitis, the sputa being sometimes streaked with a substance of a yellowish, dead-white color, supposed to consist of detached tubercular secretion: also, occasionally granular agglomerations of tubercle are found floating in the mucus; hæmoptysis may occur at this stage; but when cavities have formed in the lung the appearances are more characteristic. A large tubercular mass may be expelled suddenly, but in general its elimination is gradual. The discharge is thus formed of three parts, viz.: bronchial mucus, tubercular matter, and a purulent fluid secreted by the walls of the accidental cavity. According to the relative proportions of these three elements the expectoration varies in its characters. In most subjects it separates into two layers—a semi-transparent, gummy fluid, and a more opaque, solid matter. The latter may be suspended in flakes, or float on the surface of the fluid in small round patches (nummular expectoration.) At a still later period of the disease, the semi-transparent matter is no more to be found, and the matter consists merely of a thick, purulent fluid. At this stage of phthisis, hæmoptysis is more rare than in the first periods. The odor or taste of the expectoration are not characteristic, in spite of the Hippocratic aphorism, that in consumption it is at first salt, and afterwards sweetish. The quantity rejected varies greatly, not only in several, but even in the same individual. Shortly before a fatal termination the expectoration may be suppressed, or become looser from the enlargement of the caverns. Microscopic examination shows in the sputa of consumption the presence of pus and blood corpuscles, of epithelium, of false membranes, and of pulmonary tissue. When a piece of tubercular lung is examined with the microscope numerous corpuscles can be seen, with the particular form described in the first series of these lectures. But it is very uncommon to meet with these special granulations in the sputa, being, as it would seem, dissociated before they are expelled from the chest by the efforts of coughing. It has been said, and it is quite true, that tubercular sputa sink in water, and burn with a flame when desiccated; but these characters cannot distinguish them from the sputa of bronchitis, because they result from the presence of pus, which may exist in one disease as well as in the other.

When hydatids form in the pulmonary organs, they may be expelled by expectoration. The sputa of cancer of the lung are said to resemble gooseberry jam in color and consistency, but this fact requires further confirmation.

In diseases of the pleura, the expectoration is usually absent, or resembles that of bronchitis; but pleuritic effusions may suddenly be discharged by the bronchi, after ulceration of the surface of the lung. True pus is thus rejected, and penetration of air into the pleuritic cavity soon communicates to its contents a fetid alliaceous odor. The consecutive discharge may continue for a considerable time, and may be recalled after temporary cessation by change of position of the subject, by which a change is also effected in the relative situations of the pleuritic effusion and of the pulmonary fistula. Even after long duration these cases are susceptible of recovery.

In diseases of the pulmonary organs, the sensibility of the patient may be modified, and furnish signs for the diagnosis.

Many acute or chronic diseases of the larynx may exist without pain, and present a striking contrast between the great change of the voice and the total absence of suffering. When pain accompanies ulcers of the larynx, it is more marked when the sore occupies the vocal chords, or is situated above them, than when it is placed before the ventricles. Affections of the trachea are seldom painful. Acute bronchitis is usually attended with a distressing sense of heat within the chest, which increases with the cough, or with the inspiration of cold air. This pain may occupy the sternal region, or be complained of between the shoulders. Pneumonia, like other inflammations of parenchymatous organs, is seldom of itself a painful disease. "Pulmonum inflammatio," says Boerhaave, "plus affert periculi quam doloris;" a perfectly accurate remark, the stitch in the side, which so usually accompanies pneumonia, being in most cases due to pleuritic complication. Many consumptive patients suffer very little, others, on the contrary, are frequently troubled with pain, due to the participation of the pleura in the disorder—a fact demonstrated by the adhesions found within the thorax of these subjects on *post-mortem* examination.

Some patients feel a sort of tightness round the chest, and are fully aware, from the nature of the sensation, that their respiration is not complete; in others a sense of uneasiness is complained of in the superior part of the chest; and in these cases, on dissection, caverns are often found in these regions, separated from the pleura by very thin walls. Occasionally percussion of the chest, and even auscultation with the stethoscope, cause pain in phthisis. Pain between the shoulders is very generally looked upon as a sign of consumption; we believe that the importance of this symptom has been much overrated; it seems to us to be merely a muscular pain, due to debility, and observable in most cases of chronic disease; it is, for instance, almost constant in chlorosis. Hydatids and cancer of the respiratory organs are productive of suffering only when the pleura is affected. Acute pleuritis seldom exists without pain; its intensity is variable from a trifling to a most intense stitch in the side. It is usually seated below the breast on the affected side, and increased by motion, pressure, cough, or inspiration. It may extend to the whole thoracic wall, or be limited to the cartilaginous edges of the ribs; in diaphragmatic pleurisy, it spreads to the epigastrium, and even to the abdominal parietes.

An ingenious explanation of this pain has been offered by Dr. Beau, and seems confirmed by anatomical investigation. That gentleman attributes it to inflammation of the intercostal nerves, which, in the posterior third of their course, lie in close apposition with the pleura. Irritation of a nerve, causing pain to be felt in the region of its terminal distribution, excitement of the posterior part of these nerves in pleurisy, naturally occasions a suffering which is referred to the anterior region of the thorax, immediately below the breast.—*Jour. Med. Times. Reported by Dr. McCarthy, Paris.*

Statistical Researches in Chorea.—Dr. Easelmann, after collecting reports of cases from different authors, and adding to them his own, finds that females are much more prone to chorea than males, in the proportion of 73 to 27 in 100 cases. Up to the age of 11, of 33 patients, 22 were girls, 11 boys; from 11 to 15 years of age, of 45 cases, 34 were females, and but 11 males; about 15 years old, of 22 patients, 17 were women, and only 5 men.

Thus, whilst the proportion of males remains the same before and after the age of 10, the proportion of females increases remarkably from the 10th to the 16th years; a fact which leads to the conviction that the period of puberty exercises a great influence on the development of the disease.

Respecting the causes of chorea, fright is the most common. Thus in 100 cases, 31 were referable to this cause. Next in the category, rheumatism appears to be a not uncommon cause, eight cases in 100 being traced to it. In 42 instances, the exciting cause could not be arrived at.

The interval elapsing between the operation of the exciting cause and the onset of the morbid phenomena was not noted in 74 cases. In 8, the chorea manifested itself immediately; in 13, after a week; and in 5, after two weeks or more.

Of the success of remedies used, purgatives alone, or combined with diet, were successful in 6 cases, and of benefit in another; 2 cures are referred to rhubarb administered in port wine; arsenic was employed in 7 cases, in two with success; iron in 29, effecting a cure in 19, and benefiting in two cases; zinc, in the form of sulphate chiefly, effected a cure in 45, and improved the state of two others. Quinine, gentian, chamomile, and nux vomica were tried in nine instances, and cured in three. Antiphlogistics were used with three patients, curing two, and relieving a third. Electricity has proved of great service in old and rebellious cases, chiefly in young women in whom the chorea had an hysterical character, and in children, where the disease was not dependent on irritation; nine cases of cure out of 15 are attributed to this agent, but in five of those nine cases, oxide of zinc and carbonate of iron were conjoined in the treatment. Affusion has also succeeded, but not to such an extent as electricity.

In fine, of the 100 cases, 80 were cured, seven nearly cured, ten relieved more or less, and three died. The duration of treatment was for three weeks in 24 cases, from three to six weeks in 40, from six to eight weeks in 23 cases, and from two to three months in 13 other instances.—*London Lancet.*

SURGERY.

Dislocation of the Head of the Femur backwards—Death—Dissection of the Parts; with some Observations on that form of Dislocation. By Richard Quain. (*Lon. Med. Gaz.*)—An opportunity having occurred to the author of making a dissection of the parts concerned in a recent case of dislocation of the femur, he availed himself of it, and has embodied his observations in this communication to the society. The subject of the injury, a man aged 60, was killed by a fall from a ladder, the cause of death being extensive fracture through the base of the scull. Considerable deformity being observed in the right lower limb, the author was induced to make a careful examination of the extremity, with a view to detect the nature of the injury it had sustained. It was apparently, but not really, much shortened; it was also inverted, and separated from the sound limb. The trochanter major was altered in its relation to the iliac spine, and the depression behind it was wanting: the head of the femur could be felt towards the back of the pelvis. The limb could be flexed, but not rotated outwards. On removing the glutæus maximus, the head of the dislocated bone was exposed below the pyriform muscle, and immediately behind the acetabulum. The pelvis had sustained a fracture, but the fragments were not altered in their relation to each other. The obturator externus, quadratus femoris, and some deep fibres of the glutæus medius, were torn through. The inner and lower part of the capsular ligament was separated from the neck of the femur, and the round ligament was torn from the depression on its head. The great sciatic nerve was stretched but not injured, as were also the obturator internus and gemelli muscles. The brim of the acetabulum was slightly fractured. After giving the above details, the author remarked that there are points of contrast between the present and other cases which have been recorded of a similar accident; and proceeded to quote the history of the dissection in a few instances of the form of dislocation in question. The first was a case from Sir A. Cooper's "Treatise on Dislocations;" the second, one reported by Dr. Scott in the third volume of the "Dublin Hospital Reports;" and a third, described by M. Billard, in the third volume of the "Archives Générales de Médecine." He then proceeded to comment on these cases, directing attention particularly to the following points:—1st, the condition of the structures immediately interested in the dislocation, and especially the exact position of the femur; 2dly, the characteristic signs of the displacement; and 3dly, the restoration of the bone to the natural position. The practical inferences drawn by the author from the foregoing observations, may be summed up as follows:—1st. In the ordinary form of dislocation backwards, the femur does not reach the sciatic notch. 2d. The head of the bone is lodged immediately behind the acetabulum, over the base of the ischiatic spine, and opposite to a small part of the sciatic foramina. 3d. The injury would be correctly named the dislocation of the head of the femur backwards. 4th. During the extension made to reduce this dislocation, the thigh is most advantageously directed across the pelvis, so that it shall form a right angle, or nearly a right angle with the abdomen. At the same time the limb is to be in a state of abduction; the femur will thus be drawn away from the pelvis, forwards and outwards. The knee is to be bent, the extending force being fixed above the joint.

On Petit's Operation (*the operation without opening the sac*) *for Strangulated Hernia.* By James Luke.—(*London Lancet.*)—The object of the author in this communication was to place before the profession the result of his experience in operating for strangulated hernia, without opening the sac. He remarked, that though experience was the only fair test by which the relative merits of this and the ordinary operation could be decided, the subject was encompassed by many obstacles, such as the impossibility of obtaining exactly parallel cases, the importance of not mixing the observations of different surgeons, or judging from selected cases. To obviate these difficulties and sources of fallacy, the author has yielded up the whole of his experience on the subject of Petit's operation, which is the only mode of operating he has adopted since the year 1841, as an ordinary practice. Being unable to supply from his own case-book the result of cases operated on by opening the sac, the author appealed to the experience of others, referring especially to statistical details given by M. Texter, Mr. South, M. Malgaigne, and collected at the London Hospital, and from the British journals generally, which gave a return of mortality of from one-third to more than one-half. Where the taxis is successful similar statistics prove that a fatal result is very rare. The conclusion which seems naturally to flow from these facts is, that operative inteference should be deferred, and the taxis pursued as long as it offers any prospect of a successful issue—an interference, however, which the author considers to be fallacious and mischievous in its tendency, as involving rife source of procrastination, which in itself is the too frequent cause of non-success, attending the operation. This assertion is borne out by statistical details of cases operated on at different periods, after the establishment of symptoms of strangulation. The author then proceeded to remark that the desideratum appeared to be, the introduction of an operation by which the taxis would be aided, but without incurring the risk attending the ordinary operation, by exposure of the contents of the hernial sac; and these objects he considered to be fulfilled by Petit's operation. Inclusive of selected cases occurring between 1831 and 1841, the author stated that he had attempted the performance of Petit's operation in eighty-two instances, which, with four exceptions, likewise comprised all the cases that had come under his care since 1841. Of this number the operation was completed, without opening the sac, in fifty-seven. In twenty-five it was necessary to open the sac to complete a reduction of the hernial contents—the opening varying in extent from half an inch to one inch and a quarter. With respect to the mortality amongst these patients—of the fifty-seven in whom the sac remained unopened, seven died; of the twenty-five in whom the sac was opened, eight died. The author considered, however, that for statistical purposes, it was preferable to exclude the selected cases, (twenty-six in number,) together with four other patients, of whom three were considered moribund at the time the operation was performed, and the fourth died from secondary stricture, six weeks afterwards. Of the remaining fifty-two patients, the sac was opened in twenty-one, of which three died, and not opened in thirty-one, of which two died. Of the cases in which the sac was opened, in ten, strangulation of the contents had existed, before the operation was performed, under twenty-four hours, of which number one died; in eight, above forty-eight hours, of which one died. Of the unopened cases, the strangulation had existed in thirteen under twenty-four hours, of which not one died; in eleven, under forty-six hours, of which one died. The author considered it important that the small size of the opening made into the sac, in the former class of cases, should be borne in mind, as it doubtless had an important influence in diminishing the ratio of mortality attached to this mode of operating. He then passed on to further details relating to the above cases and the reason for opening the sac, and stated that of the fifty-two instances cited, twenty-nine were femoral, twenty inguinal, and three were umbilical hernia. He further pointed out the conclusion, from an analysis of the foregoing cases, that Petit's operation has proved most successful in the femoral form of hernia. In cases of inguinal hernia, the author limits his incision to a longitudinal division of the skin and fascia over the neck of the sac, of which cut the seat of stricture should be the centre. He then partially incises or scarifies the neck of the sac, (if the seat of stricture, as it usually is,) so as only partially to divide it, and so that it shall yield to the subsequent application of the taxis. In femoral hernia, he considers it very desirable to avoid, as much as possible, interfering with the tumor in conducting the operation, and therefore recommends that a similar proceeding should be adopted—the centre of the perpendicular incision in this case being between the upper part of the tumor and the abdominal surface. Poupart's ligament is thus reached by carrying the finger from above downwards, and the stricture is divided on a director, introduced into the femoral ring. The operation advocated by the author is not considered by him to be so applicable in umbilical hernia, except where it is of small dimensions. The author concluded by noticing and combatting the various objections which have been raised to Petit's operation, and by insisting on its value, apart from other considerations, as holding out inducement to surgeons to proceed with less delay to the performance of the operation, as he considered that procrastination, arising from the dread of having recourse to the more severe operative interference ordinarily adopted, was in itself, (as already remarked) a rife cause of the mortality which unhappily has too generally attended these cases.

Amputation—Inhalation of Chloroform—Death.—M. Robert, surgeon of the "Hôpital Beaujon," Paris, reports the following case: "A young man, tweny-one years of age, was admitted, on the 25th of June last, into the 'Hôpital Beaujon.' for a severe fracture of the shaft of the femur, caused by a ball which had traversed the limb from before backwards. Disarticulation of the thigh was decided upon. The patient was put under the influence of chloroform by means of the apparatus, divided by a spiroid diaphragm made of netting, and provided with a large mouth-piece; the nose was secured by an assistant. In three or four minutes there were a few convulsive movements pointing to the period of excitement, and soon after a complete state of relaxation came on. A large anterior flap was then made, beginning three fingers' breadth below the anterior superior spine of the ilium; hardly any blood was lost. The patient at this moment awoke, and M. Robert desired that more chloroform should be given, and continued the operation. Hardly had a quarter of a minute elapsed, than a loud stertorous breathing was heard, and the apparatus was withdrawn. The patient's face was extremely pale, lips blanched, and the eyes, the pupils of which were greatly dilated, were drawn so high upwards as to be hidden by the upper lid. The operation was immediately suspended. The pulse at that time was hardly perceptible, all the limbs were in a state of complete relaxation, and the breathing was heard at long intervals. Frictions, irritation of the pituitary membrane, forced movements of the arms and of the ribs, were resorted to; several times the respiration seemed to become more vigorous, and the pulse more distinct, but this was but a momentary improvement, and it was but too apparent, after three-quarters of an hour of incessant efforts on the parts of the persons present, that the patient had ceased to exist. The sudden paleness of the skin, the annihilation of the pulse, evidently pointed to syncope; and as the latter cannot be ascribed either to hemorrhage or a protracted operation, it must be concluded that syncope was the immediate result of the inhalations of chloroform; the more so, as none of the symptoms of the admission of air into the veins were present. The special kind of wound which the patient had received, as well as the stupor and shock consequent upon it, should, at the same time, be taken into consideration, beside the deep dejection and despair in which he was plunged."

After some discussion, it was decided in the Académie de Médecine that this case should be referred to a committee which is to present a report on ether.—*London Lancet.*

Case of Resection of the Scapula. By Prof. Fergusson, (*London Medical Gaz.*)—W. H——, aged 33, was admitted into King's College Hospital, on January 13th, 1847. He had suffered from disease of the right shoulder-joint for seven years, when the extremity was amputated at the articulation, at Fort Pitt Hospital, and a part of the glenoid cavity was at the same time removed. He recovered, but became the subject of abscess on the front of the chest about twelve months afterwards. On admission into King's College Hospital, the whole shoulder was enlarged, and the soft tissues hypertrophied; a great many fistulous openings existed in the pectoral region, and over the clavicle, which discharged copiously. Having determined on the propriety of removing the scapula entire, the author proceeded to operate on the 6th of February, 1847. The patient was put under the influence of ether, and the clavicle was first exposed, and divided about two inches from its acromial extremity with a saw; another incision extended along the spine of the scapula, and a third in the course of the old cicatrix. Some further dissection, and a division of the attaching muscles, enabled the operator to complete the excision, the subclavian artery being the while compressed over the first rib. The axillary and other arteries were tied, and the wound closed with stitches. The patient's recovery was satisfactory, and unattended by anything deserving particular notice. On May 5th, he was sent into the country, and a recent account reports him to be well and fat, though still occasionally troubled with small abscesses on the breast. After maceration, the bone exhibited a hypertrophied condition; the remaining portion of the glenoid cavity was carious, and its margin was surrounded by a mass of new ossific matter. The author concluded with some observations on the interest attaching to the case, from the rarity and formidable character of the operation required for the relief of the disease, and its successful issue.

Tetanus, (*Dublin Jour. of Med. Sci.*)—Mr. Wilmot sums up a very elaborate paper on tetanus in this Journal for August, with the following propositions.

1st. That tetanus depends on irritation, directly or indirectly, of the excito-motory system, or true spinal cord, by which it becomes surcharged with motor influence; and that inflammation in or about the cord, or any appreciable lesion, is not an essential condition for the development of the disease.

2d. That while we have ample evidence, physiological and practical, that opium is ill-calculated to fulfil the indication in tetanus, namely to diminish the excitability of the true spinal cord, until our views become improved, and the knowledge of an anti-tetanic agent ceases to be a *desideratum*, we are not justified in discarding altogether this drug.

3d. That our grand object in the treatment of tetanus should be, to support the patient's strength by the administration of stimulants and strong nourishment, with a view, as it were, to compensate the vital powers for their great exhaustion consequent upon the expenditure of force by the violent muscular contractions, which in some cases are excessive.

4th. That as the removal of the exciting cause, once the first evidence that irritation has been propagated to the spinal cord becomes manifest, does not in the least degree check the progress of tetanus, or abate the violence of its symptoms, all operations, in traumatic cases, are generally not only unnecessary but injurious.

On the Value of the different Modes of Treatment of Primary Syphilis. By B. Philips. (*Med. Gaz.*)—Mr. Philips, Surgeon to the Westminster Hospital, after giving the opinions of different writers on the value which ought to be attached to certain methods of treatment of primary syphilis, concludes by saying—

We must, then, fairly admit that the published documents do not enable us to determine—first, whether primary syphilis gets well more rapidly under one plan of treatment than another; secondly, whether secondary symptoms follow with more frequency upon one plan of treatment than another; nor, when they occur, how they are best treated; and I have no unpublished data by which the question may be resolved.

I have not largely tried the non-mercurial system among the out-patients of this hospital. To the extent I have gone, the results have been unsatisfactory; but this no doubt may be owing to the difficulty of carrying out the antiphlogistic plan among this class of people.

With respect to the mercurial plan of treatment, I have notes of 103 cases in which it was employed. The whole time during which the patients were under treatment was 3,432 days, or nearly 34 days for each patient; but then it should be mentioned that the treatment was continued until the induration had disappeared. I am not able to state accurately the number of instances in which secondary symptoms occurred. Many of the cases I totally lost sight of; but I know of five of those cases in which secondary symptoms were developed.

This evidence is obviously unsatisfactory; and I know no where else to which we can look for the solution of our difficulties than to army surgeons, who have the means of setting these several questions at rest within the next five years, and thus conferring a very real benefit upon science, by removing all doubts on the subject, and proving what plan of treatment is best. They have the patients under their immediate authority; the plan they follow will be unquestioned; and, after having ascertained the average duration of treatment of the primary symptoms under each plan—they may have the patients under their own observation—it may be for years afterwards, so as to ascertain how frequently secondary symptoms are manifested, and what is their relative severity. Until this is done we can only express the opinion we entertain—not certain, however, that it is correct, but believing it to be so—that, of all plans of treatment of primary syphilis, a mercurial one is best; that under it, when discreetly employed, the symptoms are soonest extinguished; that secondary symptoms are less frequent; and, when they occur, are not more severe than when any other plan of treatment is followed.

—

On Division of the Falciform Border of the Fascia Lata, for Varix of the Saphena Vein. By W. B. Herapath, (*Provincial Med. and Surg Jour.*—Setting aside the various known causes productive of varicose veins in the lower extremities; it appears to us that there is one which has hitherto escaped the attention of surgical writers, one also that admits of an easy remedy. Varix has been too generally thought to depend upon an imperfect condition of the valves of the venous trunks; but if pressure exist upon the vein at any point intermediate between its radicles and the right side of the heart, distention of the distal portion will be produced to such a degree, that the valves can no longer close the dilated vein; in this may consist another cause of varix. The superficial cutaneous veins are more commonly affected. These are the internal and external saphena, both of which have to pass through apertures in the deep fascia, in order to reach the large trunks. Now, should these apertures at any time be two small to allow the passage of the blood carried by the veins, distention must ensue, and varix result. The operations hitherto adopted for the removal of a varicose state of the saphena relieve by *obliteration* of the veins; consequently advantage is taken of anastomotic communications, and the circulating current is sent into other trunks. The plan which we propose is a simple division of the falciform border of the fascia lata, which plan has been tested successfully by repeated experiment and cases; it restores the circulation in the natural direction, by removing the cause. It is an operation devoid of danger when carefully performed and therefore when applicable (which is not the case in the varix of the popliteal vein) presents additional advantages over those hitherto proposed.

—

On the Treatment of Fractures of the Thigh-Bone in Infants, in the flexed Position. By E. F. Lonsdale. (*Med. Gaz.*)—When fracture of the thigh-bone occurs in infants or in very young children, it is by no means an easy matter to prevent shortening of the limb, owing to the difficulty of maintaining the correct apposition of the two portions of bone. This difficulty all surgeons of any experience in the treatment of fractures must have met with. My attention has been more particularly directed to the subject lately, from many cases having come under my care at the Orthopædic Hospital, as well as two in private practice, the children having been brought for the treatment of existing lameness, in all of which there was shortening of one limb, owing to the thigh-bone having been fractured at a former period, and to the want of proper care in preserving the correct apposition of the bone during the treatment. On examining the limb carefully, the cause of the shortening was found to be owing to the extreme curve forwards of the shaft of the femur, and not to the lower portion being drawn up behind the upper (which is generally the cause of the shortening in adults.) The result, however, is the same—namely, the approximation of the knee to the hip-joint, and a consequent diminution in the length of the whole limb.

The cause of this increased arch in the bone depends on the difficulty of keeping the upper end from tilting upwards, and of bringing the lower portion into the same line with it. The bone then unites in an angle, causing the whole thigh to appear curved forwards; for in the majority of cases, as already stated, there is no retraction of one portion behind the other. In adults this evil is guarded against by the employment of the inclined plane; but in infants or very young children this apparatus cannot be employed, for there is the absence of sufficient weight in the pelvis and body, as well as the difficulty, if not impossibility, of keeping the child in the horizontal position—points essential to secure its action, and to preserve the correct line of apposition of the two portions of bone.

The treatment generally followed for these cases, and the one that I have hitherto employed myself, is to keep the limb in the extended position, by using long lath splints, extending from the hip down to the foot. (I am convinced that short ones, applied to the thigh only, cannot keep the ends of the bone in apposition.) The splint in the front should be the longest, and be made to pass up before the hip-joint as high as the crest of the ilium. A thick pad is placed on the upper portion of the thigh-bone. Great pressure, however, is required to insure the effectual action of the splints, as well as the necessity of keeping the child in the horizontal position, a position that is difficult and irksome in infants, more particularly during nursing.

Meeting with these difficulties, I turned my attention to the possibility of treating these cases by the flexed position, and have been enabled to do so by the following simple means, which, in the case of a child twelve months old, recently under my care, answered most satisfactorily; the correct apposition of the ends of the bone being preserved at the same time that the position of the child was less constrained and awkward.

I employ two narrow long strips of sheet iron, an inch wide, and thin enough to allow of being easily bent at any angle required, though sufficiently thick to bear the weight of the limb without yielding. They are applied as follows: The child is placed on its back, and an assistant holds the limb in a position so as to flex the hip and knee-joints, the angle of flexion being similar to that employed when the inclined plane is used for adults. The two thin iron splints are then bent at angles corresponding to the hip, knee, and ankle-joints, to adapt themselves to the limb, in the position in which it is being held by the assistant. An important point to attend to is, the proper length of the splint. The upper one should be long enough to pass up in front of the hip-joint, to lie flat on the lower part of the abdomen, and to extend down over the instep to the toes. The back one should extend up behind the buttock, being curved to fit its shape, as high as the posterior margin of the crest of the ilium, and long enough to extend down behind the heel to the sole of the foot. If the two splints are bent at proper angles, to correspond with the shape and position of the hip, knee, and ankle-joints, they will, when firmly bound to the limb, keep it in the position required, which is one that most favors the correct apposition of the ends of the bone, by relaxing all the muscles. The limb must of course be evenly rolled before applying the splints, and the splints themselves be padded. The upper ends of the splints are to be firmly fixed to the pelvis, by passing the bandage many times round them, and occasionally reversing the direction of the bandage round the ends of the splints themselves, to prevent them being displaced laterally.

***On Amputation and Local and General Etherization in Traumatic Tetanus.* By M. Roux, (*Med. Gaz. Sept.* 1*st.*)—" If tetanus be caused by a wound, we must not hesitate to amputate immediately."—*Larrey, Chir. Milit.*, t. i. p. 260.**

" Experience has long banished from my mind all doubt as to the alleged efficacy of amputation in these cases."—*Dupuytren*, *Clin. Chir.*, t. ii. 609.

I. *On amputation in traumatic tetanus.*

Struck with the inefficiency of the treatment in the numerous cases of traumatic tetanus which he met with in Egypt, Larrey was induced to combat that so often fatal disease by amputation.

Velpeau, Lisfrance, Blizard Curling and others, have reproduced this idea in their writings; while on the other hand, Boyer, S. Cooper, Dupuytren, Berard and others have combated it.

Others—among whom is M. Baudens—consider that the question, still undecided, can only be settled by experience and a just appreciation of the facts.

I propose to examine this question anew, both in a theoretical and a practical point of view.

While some surgeons have advised amputation in all cases of traumatic tetanus, others, and these comprise a great majority, only amputate when the nature of the wound itself requires the loss of the limb.

The partisans of amputation, considering that the primary cause of tetanus resides in that part of the peripheral nervous system directly modified by the wound, have thought that by the removal of the cause the effect will cease. They found their opinion on the gravity of the disease, on the imminence of the danger leaving no choice, and on the two following considerations: 1. The wounds followed by tetanus are often complicated by the laceration of nerves, and by the presence of unrecognised foreign bodies, effects which are removed by amputation. The reality of this fact has often been demonstrated by the autopsy: of this Dupuytren reports a remarkable example. I have noticed two additional cases, under the case of M. Lallemand, at Montpellier. 2. Amputation being inevitable owing to the gravity of the lesion, the disturbance which it excites is far from inducing the same danger that would exist if it were practised after the cessation of tetanus, which it might then reproduce. In addition, the patient is not exposed to the other results of severe lesions. Finally, six cases of recovery after amputation have been recorded by French surgeons; and out of eleven cases reported by Mr. Blizard Curling, seven recovered. In a case cited by Valentin, tetanus, following an injury to the great toe, which disappeared after amputation, returned before cicatrization was complete.

Many surgeons object to amputation in traumatic tetanus for the following reasons: 1. Traumatic tetanus may have its origin in a nerve affected by a lesion, but once developed it invades and exists in the whole system. 2. Amputation often itself the cause of tetanus, produces disturbance capable of aggravating the disease. 3. The annals of such cases attest that several therapeutical agents have produced more cures than have been obtained by amputation. 4. Finally, amputation is far from always curing traumatic tetanus; Larrey, Dupuytren, and Cloquet, have cited six unsuccessful cases; and S. Cooper three. According to Sir James Macgregor, the English, after the battle of Toulouse, made many unsuccessful attempts to cure tetanus by amputation.

The solution of this question, is without doubt, one of the most difficult in surgery. In my opinion—

1. Amputation is not usually a curative means in tetanus.
2. Amputation will most probably be of service when tetanus supervenes on irregular wounds, complicated with undetected foreign bodies, and with lacerations of nerves.

II. *On etherization in traumatic tetanus.*

The appreciation of the modifications which the organization presents under the influence of tetanus and of etherization, soon led surgeons to oppose those agents which produce insensibility and muscular relaxation to a disease characterized by opposite phenomena, exaltation of sensibility and muscular rigidity.

Recovery from idiopathic tetanus has already resulted from the use of the ether or chloroform in cases treated by MM. Petit, Mignot and Ledru.

Traumatic tetanus, more unyielding to treatment than traumatic, has already yielded several times to anæsthetic agents, since, by these means, Pertusio and T. Hopgood, have obtained successful results. But at other occasions chloroform and ether have proved unserviceable, as in the cases of MM. Velpeau and Ivonneau; indeed these agents appeared to aggravate the disease in the case of one of the wounded of February, cited by M. Robert, and in another case communicated by M. Roux.

In spite of the want of uniformity in the results obtained, some clinical facts authorize a perseverance in the plan of etherizing patients affected with tetanus from physical causes, and of submitting them to repeated etherizations.

In applying the physiological views of reflex movements to traumatic tetanus, I think we are led, not only to etherize the whole system through pulmonary inhalation, but also all wounded surfaces, so as to modify them by local etherization from the immediate application of anæsthetic vapors.

If, as Muller, (Marshall Hall,) and the most eminent physiologists of our time, consider, the theory of reflex movements is applicable in the explanation of tetanic contractions, much light will be thrown on the pathology and therapeutics.

"When," says Muller, (Phys. t. i. p. 609) "sensations which have been produced by external impressions on the sensitive nerves, determine movements in other parts, the effect is never the result of re-action between the sensory and motor fibres of a nerve itself; but it depends upon this, that the sensorial excitement is transmitted to the brain and spinal marrow, and then re-acts on the motor fibres.

"In pathological conditions," he adds, "the strong local excitement of a sentient nerve, may, by the violence of the stimulus transmitted to the brain and spinal marrow, produce convulsions and rigors, as may be seen after the extraction of a tooth. It often happens that the local irritation of nerves from inflammation, or the presence of a tumor, will produce general spasms, and even epilepsy.

"The irritation of the spinal marrow, occasioned by local excitement, may be so severe where there is an extensive injury, as to give rise to continual convulsions. All violent irritation of the spinal marrow, is a tetanus, which may have been excited by narcotic poisons, or by some immediate and local impression. We may easily understand on these principles, the manifestation of traumatic tetanus.

In this form of tetanus the muscular contraction may be caused by two circumstances—first, by an injury to some part of the sensory nervous system; secondly, by the immediate lesion of the motor nervous system.

In the first case, the lesion may exist at the extremity of one or more sentient nerves, in the course of those nerves, or in the posterior or central portion of the spinal marrow. The impression inflicted on the sentient nerves by a wound, is transmitted to the posterior part of the spinal marrow, which re-acts on the motor portion of the spinal marrow; and hence the convulsions and muscular rigidity, the duration of which depends on the permanence and extent of the exciting cause. Things happen nearly in the same manner, and the final result is the same, when there is immediate injury to a sentient nerve, or to the sensitive portion of the spinal marrow.

When, on the other hand, the lesion exciting the tetanus exists in the motor nervous system, it always affects the anterior layers of the spinal marrow, and to an extent in relation with the number of the contracted muscles. The lesion of only one motor nerve, will only excite contractions in the few muscles supplied by it. When a lesion of the motor portion of the spinal marrow excites tetanus, the phenomena are not explained by the laws which regulate the reflex motions.

The primary cause of traumatic tetanus resides in the wound itself, and may exist either in the extremities or course of the sentient nerves, or in the motor portion of the spinal marrow, or the motor nerves.

Surgeons have acted in instinctive accordance with these principles when they have successfully treated tetanus by such means as the local application of opium and morphia; the division of the lacerated nerves; the extraction of foreign bodies which had wounded the nerves; the division of ligatures which compressed them; the incision of imperfect cicatrices; cauterization; the amputation of the limb, and other modes of procedure.

To the list of successful means I propose to add the direct or local etherization of the wounded surfaces. By this direct etherization and consequent local etherism, I hope to isolate the affected part from the rest of the organism, to render insensible the wounded sentient nerves, so as to unfit them for transmitting morbid impressions, and to arrest the tetanus by preventing the re-action of the sentient upon the motor nervous system. But while this local etherization, (which I accomplish easily by means of my ether apparatus,) ought to be practised on the wounded surfaces, or the lacerated sentient and motor nerves, the anæsthetic vapors ought to be used with judgment, so that the insensibility may be excited to a proper degree, and that the mobility of the part may not be permanently abolished. These precautions will be superfluous, when the surface of an amputated stump, or of the integument denuded by a burn or lacerated wound, shall be subjected to etherization.

M. Longet on Local Etherization.

It results from the experiments of M. Longet, "that a mixed nerve, the sciatic, for instance, exposed in a part of its course, and submitted to the action of the vapor of ether, or of ether itself, becomes insensible, though still excitable, at and below the etherized point.

"In the *first degree* of direct etherization, which appears at the end of half a minute in dogs and rabbits, the nerve, although absolutely insensible at the points indicated, still has the power to excite voluntary motion in the muscles which it controls. In the *second degree* which manifests itself after an immediate etherization somewhat more prolonged (three or four minutes,) the mixed nerve loses the power it possessed in the *first degree:* it is still insensible, and is entirely dispossessed of the faculty of exciting voluntary motion, though its excitability still remains. Finally, in the third degree, which may be observed after the contact of the ether with the nerve of from twelve to fifteen minutes, there is neither sensibility nor voluntary motion in the muscles supplied by the nerve, nor any proof of excitability in the nerve."

The author afterwards makes the important remark, "That the direct etherization of the nervous system may be so conducted as to produce effects sometimes transient, at others lasting. In the first degree, the anæsthesia can only last a few seconds; in the second, the sensory and motor faculties sometimes return in less than twelve hours; finally, in the third degree, the prolonged contact of the ether may alter the intimate composition of the nervous tissue, the faculties of which can only be restored by the regeneration of the tissue itself."

The experiments on the same subject communicated to the Academy of Sciences by M. Serres, and the researches by MM. Pappeinheim and Good, on the structure of nerves which have lost their function under the influence of ether, show the danger of exposing the nerves too long to the action of ether.

In advising direct etherization to wounds, lacerated nerves, and burns, I would confine its action to the first and second degrees pointed out by M. Longet. It is, indeed, advisable not to go so far as the second degree when the nerve to be affected is very large. In such a case the exposure of the wound to the anæsthetic vapors, *repeated at short intervals*, would offer the advantages of continuous etherization without the dangers. Local etherization may be prolonged without danger when it is applied to a superficial wound.

In proposing direct etherization as a local treatment of traumatic tetanus, I do not conceal from myself that that disease soon embraces the whole nervous system, and lessens the chance of success by attacking it at one point only. Local and general etherization ought to be conjoined in such cases with the other successful therapeutical agents.

My confidence in the efficacy of the means I propose is not founded on the treatment of any case of tetanus; nevertheless, experiments which I will relate authorize me in concluding that it is rational, when we employ general etherization in traumatic tetanus, to conjoin with it local etherization.

III. *On amputation and etherism in traumatic tetanus.*

It is probable that the opponents of amputation in traumatic tetanus, even when the lesion itself calls for the loss of the limb, will have modified their opinion since the discovery of chloroform.

Amputation practised during etherization is unaccompanied by any shock to the system, and converts the complicated lesion before existing into a simple wound. Besides this, etherism, producing phenomena the opposite of those of tetanus, opposes with advantage its action to that of the disease.

Every thing leads to the belief that the truth of this principle will be acknowledged. *In traumatic tetanus, where the injury necessitates the loss of the limb, etherism ought to be excited, and amputation performed.*

In a case where tetanus followed an injury to the forefinger, M. Velpeau employed repeated etherization, without amputating. M. Yooneau employed chloroform and ether, without amputation, in vain, in a case of tetanus following a gun-shot wound of the right hand. Both these patients sank, in spite of the repeated employment of chloroform and ether.

In the following case death took place, although amputation was performed and repeated etherization was practised.

Case.—*Traumatic tetanus—amputation of the leg during etherism—repeated etherization during four days—death.*

9th April, 1848. Joachim Gauthen, a robust man of nervous temperament, was admitted into the Hospital of Marine, at Cherbourg, suffering from fracture of the fibula, with complete dislocation, outwards, of the ankle-joint. There was a small wound over the inner malleolus. The foot was easily replaced. Next morning there was neither swelling in the limb, nor general fever.

On the 12th, heat, redness, and swelling of the limb came on, accompanied by fever. During the next few days he became worse; fœtid discharges came through the wound over the malleolus; and the parts over and within the articulation began to slough.

Incisions were made, and on the 21st the swelling was lessened, but the general condition of the patient was worse: the foot was displaced; the sloughing was extensive; the joint and the tibia exposed; the foot red and œdematous. In addition, he spoke and swallowed with difficulty; and trismus was present.

Amputation was now indispensable, and would have been already performed but for the general reaction, and the great swelling of the upper part of the leg. The immediate amputation of the limb was decided on, the occurrence of tetanus not being considered an obstacle.

In five minutes, unconsciousness was produced by chloroform. The inhalation was continued for three minutes more, until the stiffening of the limbs gave place to complete relaxation; and the leg was amputated, the patient being quite unconscious. The chloroformization was repeated several times during the operation; and the patient was insensible for about eighteen minutes.

After the operation, the trismus was slightly lessened; but the jaws could only be partially opened. The patient complained of violent pain in the stump. In the course of the day chloroform was administered five times. Each time pain was suspended with consciousness, and the trismus lessened with muscular relaxation. But these effects were only momentary.

Next day the pain was lessened, but the trismus was more pronounced. Poultices, with laudanum, were applied to the wound. Etherization was practised six times in the course of the day. The effect of ether on the patient did not differ from that of chloroform.

On the 23d, opisthotonos was established; but the limbs were still free, except during paroxysms. Ether was given once, and chloroform six times during the day. The ether excited a prolonged rigor, violent cough, and a sense of suffocation. The ether was consequently exchanged for chloroform. During the evening, after the last inhalation, the bronchiæ appeared to be filled with frothy fluid.

On the 24th, the symptoms were not materially modified. Deglutition was more laborious, and was always accompanied by cough and a sense of suffocation, as if each time liquid entered the air-passages. The trismus and opisthotonos were complete and unyielding. He inhaled chloroform thrice during the day. The difficulty of breathing increased, and he became gradually worse. Deglutition was only possible during the short interval of muscular relaxation which followed the inhalation of chloroform.

At midnight he became suddenly worse: the respiration being frequent and embarassed, the pulse rapid, and anxiety increased; convulsions came on; intelligence, hitherto scarcely affected, disappeared; a cold sweat covered the body; and, almost without agony, he died at 1 A. M., on the 25th.

Autopsy 24 *hours after death—Complete muscular relaxation, which came on a few hours after death.*—The brain and spinal marrow, slightly congested, were in all respects normal. Little blood in the cavities of the heart. Lungs engorged, but crepitating. Mucous membrane of the air-passages, especially in the minute bronchi, of an ineffaceable red. Nothing remarkable was observed elsewhere.

In this case, the anæsthetic inhalations were only followed by momentary relief. The etherism, sometimes exciting cough and sense of suffocation, aggravated, for the time, the disease. The progress of the disease was not modified by their use, since he died on the fifth day from the beginning of the attack; the usual period at which the tetanic die.

In reflecting on the intense pain seated in the stump, it occurred to me, that direct etherization of the wounded surfaces might remove the painful impressions which were transmitted to the nervous centres, and cure the tetanus by removing the reflex action on the muscular system. It seemed to me that this local and direct etherization of the wounded surfaces would affect with anæsthesia the extremities of the sensitive nerves; interrupt the connection of those nervous extremities with their centres; deprive the nervous system of its painful participation in the suffering of divided parts; remove the muscles and the whole organism from the reaction which violent irritation in the incitor nerves produces: in a word, isolate the wound, by detaching it, so to speak, from animal life, without injuring its relations with organic life. This isolation, it appeared to me, might be obtained by the direct and continuous action on the wound of the vapors of chloroform or ether, without having to fear that the insensibility in the nerves would spread beyond the points immediately acted on by the anæsthetic vapor, that there would be danger from absorption, or that the stump, deprived of the reaction of the whole economy, might want the necessary irritation to carry it through its successive stages to cicatrization: since these vapors, which deprive the nerves of their functions, excite the rest of the tissues.

Experiments, with regard to the effect of local etherism on the lower animals and on man; but these are neither sufficiently numerous nor decisive to be yet brought forward.

Military Surgery—Gunshot Wounds—Appearance of the French Hospitals, after the late Insurrection. By Charles Kidd, M. D.—*The Dublin Journal of Medical Science, for August,* contains a letter from Dr. Kidd to its editor, describing the appearance of the French Hospitals, their management, the character of the injuries, the treatment, mortality, etc. etc., after the insurrection in June last; from which we extract the following interesting information.

The following is the official return of "killed and wounded" during these fearful days:—

Wounded, received from 23d to 28th June.—Civilians, 806; soldiers, *gardes mobiles,* and *gardes republiques,* 813; total, 1619.

Amount of Dead brought to Hospitals.—Civilians, 129; soldiers, *gardes mobiles,* and *gardes republiques,* 33; total, 162.

Total killed and wounded.—Civilians, 935; soldiers, *gardes mobiles,* and *gardes republiques,* 846; total, 1781.

One hundred and sixty-two dead corpses were brought to the doors of the hospitals to be recognised by their friends!—the Morgue, the usual place for such exhibitions, having been obliged to be closed up. Many of these dead bodies were mangled and shattered by cannon-shot, or torn by the cavalry horses. Of the wounded, fifty-three civilians and 104 *gardes mobiles* left again on having their wounds dressed, while 195 died within the first five days; leaving at the time of my attendance over 1400 cases, with some 300 or 400 in the temporary hospitals.

A feeling of sorrow seems to fill every one now in Paris for what has happened. Presents of lint and charpie are deposited at Notre Dame and other buildings, for the use of the sick. Even many of the ladies of the city offered their services, staying up at night with the wounded. A good deal has been said about poisoned balls, but, I believe, without any foundation. Many of those extracted were made of copper and zinc, and other unusual metals, but the wounds inflicted by them did not seem possessed of anything peculiar. The number of wounded in the hospitals at present far exceeds that of any other revolution. A somewhat singular suggestion has been mooted, that of M. Gannel, to embalm all those that fell during the four eventful days. It seems he has made an immense fortune by his process. He is to be seen every day at the Hotel Dieu, and has been worrying the Government about it. General Cavaignac has turned a deaf ear to the matter. In his great zeal, however, he offers to embalm republicans of every sort who may honor him with their confidence.

At La Charité, under Velpeau, and MM. Gerdy and Morel-Lavellec, were 115 wounded, which I took the trouble of classifying as follows:—Injuries of head, 8; thorax, 8; upper extremities, 34; abdomen, 13; lower extremities, 33; various minor injuries, 19.

Several amputations were performed. Other cases, though of a very grave character, were apparently doing very well under the ordinary treatment. In one case the ball went right through the popliteal space without injuring either nerves or vessels; in another, a man shot in the back of the head, the ball went out of the mouth: both were apparently doing well. In many instances the ball had gone through the shoulder-joint without any very manifest symptoms supervening. In another case a man was shot through the kidneys,—the ball making two openings,—actually broken in two on the bodies of the vertebræ. In another case, doing well, the entire foot was shattered by a cannon-shot. In another a very severe injury occurred in the track of the femoral vessels, without, however, any hemorrhage: the man seemed as if nothing had happened. The injuries of the lower extremities, were, indeed, almost beyond belief. In one singular case of injury of the head, the entire of the coverings of the lower jaw had been swept away, leaving the cartilages of the larynx exposed; there seemed no unusual hemorrhage. In a severe injury of the upper extremity the ball traversed the upper part of the shoulder, wounding the spinal column, and producing a want of sensibility and motion; the poor man was alive simply because it had not gone one half inch higher, and cut off the origin of the phrenic. Another poor creature had received a bayonet thrust through his eye; another had a ball through both legs. In fact, every variety of horrid injury was to be seen. Amongst the newest ideas on gun-shot wounds is that of Velpeau, at La Charité, who has originated a classification and treatment of such lesions on the principle that they are analogous to burns. Every one knows the six degrees of burns of Dupuytren, and the treatment each will require. Velpeau states that the same thing holds in gun-shot wounds. The reparative process is the same; the symptoms the same; the treatment not very different. The ancients, I need scarcely say, held this doctrine till demolished by Ambrose Paré. Velpeau tells his class that the ancients were right; they saw the thing as a fact; but others came and built up a set of theories on it, that ultimately hid it from our view. The work of reparation, in many instances is certainly the same; perhaps the shock to the system also.

At Saint Louis Hospital, under Jobert and Malgaigne, I found the worst cases I had seen. Many of them are there yet, and some are very interesting subjects of study. This hospital is beautifully kept; several officers of the national guards and line were under treatment; and every facility is given to the pupils. Malgaigne in particular, an excellent surgeon, is wonderfully communicative. As at La Charité I classified the cases as follows:—Injuries of head, 25; thorax, 18; upper extremeties, 100; abdomen and pelvis, 20; lower extremities, 142; minor injuries, 15.

Some of the wards are under the care of M. Gosselin, and contain exceedingly bad cases; one, an entire destruction of the thigh by cannon-shot, with fracture of the femur; another, a frightful crushing of the hand; several injuries of the most desperate kind of the lower extremities; one, a ball in the track of the ascending colon and gall-bladder without any very bad symptoms.

Under the care of Malgaigne I saw two cases in particular of extensive injury of the shoulder-joint; mortification in one, removal of the extremity at the joint in another. There were crowds of instances of balls through and through limbs without any bad effects. In amputating I think the French surgeons do not clean the bone as we do in this country. The thing is done in an instant, but I am quite satisfied not so well as it might be. Whether on account of the hurry of the operation, or the change worked by chloroform, I do not know, but I had seen the most formidable operations also performed without removing the patient to the operating theatre. If the operation can be well done under such circumstances, perhaps it is an improvement, as so much of the strength of the patient as would be lost by removal is husbanded. The process of "chloroformizing" is not managed as well as I have seen it at home; the patient is merely allowed to smell the vapor for some time. Speaking of this powerful agent perhaps I may say it is at present, in some institutions in Paris, somewhat under a cloud, from the many deaths that have occurred from its use there and elsewhere. The chloroform bottle is, however, carried about the hospitals as regularly as the other *armamenta medicaminum.* In one ward of St. Louis, for instance, we came to a desparate case of injury of the leg; Malgaigne called for the chloroform bottle while visiting the beds next it; the poor man was prepared for his fate, put under the effects of the anæsthetic, and on the return of Malgaigne settled for amputation. An assistant compressed the artery. The knife was run through over the bone; a large flap down to the patella was formed in a second; a sea of thick, grumous, pus-like matter followed; the bone was at once sawed through without any effort to save more flesh, the flap being somewhat limited; a large vermiform clot was taken out of the vein; the chief artery tied, and the rest left to the assistants.

Not a word was spoken all the time; Malgaigne seemed as collected and cool as if it were any ordinary case, and passed on to the other end of the ward. Scenes like this are of hourly occurrence, and during the first few days of the insurrection were even still more frequent. I am quite aware that there is nothing very remarkable about removing a limb now-a-days. I think, however, that any one anxious to see what the system will bear in that way, or the other fearful injuries it will still battle against without any obvious effect, will find a rich field for study among the hospitals and ambulances of Paris for the next two months. With few exceptions, everything is left to the *vis medicatrix naturæ,*—the expectant system of the French, which, if not exactly the best, is, perhaps, superior to the opposite one so common elsewhere. Indeed any one anxious for a proper conclusion as to what may be left to nature and what not, cannot fail to find it in the Paris hospitals.

At the Hotel Dieu, in the ten days preceding the 2d of July, 450 wounded were received. In the wards of Roux, of 127 wounded, 25 died almost immediately; 100 of these were cases of penetrating wounds of the abdomen, in one of which the liver must have been pierced; two cases in which the lungs were wounded; several other injuries of the chest and upper extremities; one very fearful case, in which the man was shot through the loins, the ball traversing the bodies of the lumbar vertebræ, producing retention of urine, paralysis of motion, and *not* of sensation, in the lower extremities: death after four days. 31 Quitted the hospital cured, leaving at the time of my visit the following under the care of Roux:—Injuries of the head, 11; thorax, 1; upper extremities, 23; abdomen, 2; lower extremities, 28; total, 73.

Under the care of MM. Manec and Voillemier:—injuries of the head, 7; thorax, 5; upper extremities, 26; abdomen, 7; lower extremities, 29; minor injuries, 3: total, 77. 150 in all.

In the extraction of balls the French surgeons use a great deal of discrimination, and believe that in making counter-openings, and unnecessarily enlarging the original wound, ought not to be practised; that, like the abuse of the trephine, the means of cure may lead to worse effects than the first injury, and that we should *wait for symptoms.* Two very ingenious instruments have been invented for getting at balls; like all such nice things, however, they are seldom used. One termed the "*Alphonsin,*" differing little from the lithotrity instrument, we are all familiar with at this side of the channel; the other, a little more complex, and containing a sort of cork-screw addition for fixing the ball and drawing it away. From the circuitous direction of balls in general, it is quite obvious what little use such instruments can be.

At the *Maison de Sante* 90 were admitted; of these, 8 were severe penetrating wounds of the chest,—many of them doing well after repeated bleedings. It was somewhat curious to witness the apparent want of symptoms in several patients here, though the most vital parts were evidently implicated. In one man the ball had gone through the spine of the scapula, fracturing that bone, and giving obscure evidences of its presence in the chest: after two bleedings he appeared recovering. In another case, though the ball had gone through and through the chest, injuring all the parts at the base of the lung, no bad symptoms had presented themselves. The worst appearances, however, may be a work of time; the immunity from pain or constitutional disturbance, so soon after the receipt of the injury, being a little fallacious. Much of it, however, I would be inclined to ascribe to the assiduous attention shown the patients, and the quickness with which any inflammatory aggression is subdued by bleeding. A *garde mobile* suffered under a wound of the head for some days; the brain was quite perceptible; reduced to a reddish pulp, it seemed insensible; pulsating as usual. He did not complain of anything unusual either, but died four days after. At this little hospital, out of 90 admitted during the insurrection, amputations were performed eight times.

At one of the temporary hospitals I found 75 wounded, of the ordinary character of cases: there were only a few about which there was anything peculiar. One man received a ball at the external angle of the eye, which entered deeply into the face: there seemed no bad symptoms. I should say, however, the commissure of the optic nerve had been injured. *He was blind of both eyes.* Several instances of injuries of the chest presented themselves, where the ball had gone round nearly the entire thorax without entering: these patients were recovering. One, indeed, in which the ball had to all appearances entered the chest, had got severe inflammation of both lungs and pleura; much fear was entertained for his life. In one of the beds a poor fellow, surgeon of one of the regiments of the line, elicited much sympathy. In no way daunted by the crash of barricades, he remained with his regiment till struck by a ball, which shattered the lower end of the femur, going through the knee-joint. The poor fellow seemed quite collected, and great hopes were entertained for his recovery.

At Val de Grace, a military hospital under the care of M. Baudens, something over 100 patients, many of them very severely wounded, were received. The treatment seemed to differ little from that in the other hospitals; refrigerants, to keep down inflammatory action (ice, cold water, &c.), purgatives and bleeding, where necessary; and attention, the most assiduous, to changes as they occurred. Fomentations of various kinds, when suppuration set in, and other matters, as the cases might require. M. Baudens does not seem a great advocate for amputation. He had operated, however, fifteen times after the days of June. 16 patients had sunk from the effects of their wounds. The remainder were progressing favorably. Of the number in this hospital, I made the following classification:—Injuries of head, 12; thorax, 6; upper extremities, 35; abdomen, 8; lower extremities, 47; minor injuries, 15; total, 123. A somewhat singular case occurred here, that of a young soldier, in which the ball impinged on the eye, producing a contusion of the eye-lids and cornea merely, to all outward appearance with little constitutional symptoms, but in whom the shock to the eye caused complete blindness! Here, as everywhere else, one sees the different character of the cases, among the well-fed military, and the but too often wretched *ouvriers*. Several of the latter were attacked with gangrene. The treatment in all the hospitals is, perhaps, a little too general; what is ordered for a stout *mobile* being likewise ordered for a starving insurgent. All these injuries not requiring amputation are treated by cold applications, and venesection, if necessary, followed, after reaction, by emollient cataplasms. There is very little cutting or enlarging of wounds, and a great deal is left to Nature. The relative mortality will, perhaps, prove whether this or the opposite system is to be preferred. In two of the worst cases of wounds of the chest here, the operation for empyema had to be performed.

MIDWIFERY AND DISEASES OF FEMALES.

Placentitis Occurring Twice in the same Woman.—Dr. Van Hengel attended a woman, thirty-three years of age, who was delivered of a child, of whose death there had been distinct signs three weeks previously. The fœtal portion of the placenta had degenerated into a grayish-white color; on the uterine surface it was still spongy and porous in several spots. Two years afterwards the woman was again near the time of her delivery. She stated that between the seventh and eighth month she had had a slight attack of fever, after which she was seized with severe pain in the right side of the abdomen, in which part she felt as if there were a weight lying within her; at the same time she suffered from thirst, sleeplessness, headache, and loss of appetite. Subsequently she was troubled at various times with bloody, watery, and purulent discharges from the vagina. The pulsation of the fœtal heart could not be heard, nor could any movements of the child be felt by the mother or her medical attendant; and at the same time she complained of nausea and a sensation of cold in the belly. Some days after, she was delivered very quickly of a child which appeared to have been long dead. The placenta was circulur, curled inwards at the edges, grayish-yellow in color. On the fœtal surface it was dark-brown or almost black; and it was so indurated as not to bend when held out by one point.—*Med. Times.*

—

Successful Removal of an Ovarian Tumor complicated with Pregnancy. By H. E. Burd.—The patient was a woman about 25, the mother of three children. The history of the case, and character of the tumor, showed it to be ovarian disease. The measurement over the umbilicus was 45 inches, and from the ensiform cartilage to the pubes 22 inches. Her dyspnœa was urgent, and she was unable to lie down. There was nothing to indicate the existence of pregnancy. It is unnecessary to describe the mode of performing and the steps of the operation. Notwithstanding the extent of the incision, it was found necessary to pass a trocar into the largest cyst; from which three gallons and a quart of fluid were drawn of, reducing the tumor to a convenient size for passing through the aperture. On drawing the tumor forward, so as to examine its pedicle, the uterus was brought into view in a gravid state, and was supposed to have reached the third or fourth month of pregnancy. The operation was performed on the 15th of September. On the 17th abortion took place; the labor was easy, and the child was born alive. No hemorrhage ensued, and the woman bore her labor better than could have been expected. The frequent occurrence of collapse was the most important and alarming symptom after the operation, requiring opium, ammonia, and brandy. The absence of peritoneal inflammation was remarkable. On October 8th, three of the ligatures came away. On November 6th, the wound was quite healed, and the patient able to walk about.—*Med. and Surg. Jour.*

—

A Dicephalous Monster with one head black and the other white. (*Lon. Med. Gaz.*) M. Prus has recently addressed to the Medical Society of Paris, a communication on a singular case of monstrosity, which occurred at Alexandria. The monster, which was born dead, had two heads attached to one trunk. The heads were well formed: one was white, and appeared to correspond to about the eighth month of uterine life; the other was black, of larger size, and had apparently reached maturity. In other respects, the child, which was a male, was normally developed. The shoulders, trunk, and upper and lower extremities were white. The nails were imperfectly formed, and resembled those of an immature child. The alteration in the color of the skin commenced about the level of the neck of the black head. It was here brown, becoming gradually deeper, and passing imperceptibly to a deep black, extending over the whole of the head and face. M. Prus made a careful examination, and satisfied himself that the change of color was not owing to any nævus, sanguineous congestion, or other morbid condition. When the epidermis was removed, there was a thick layer of pigmentum nigrum in the mucous tissue of the skin. He therefore referred this head to the negro-type—an inference which was justified by its form and general aspect. The parents were *fellahs*—the mother was from 25 to 30 years of age; and the father about 30, a laborer in the port of Alexandria. Like all individuals of this tribe, they had a brown skin, with a yellowish tint. The woman died soon after her delivery: she had previously had five well-formed children, of whom four had been born dead.

The physiological questions which arise in respect to this monster are difficult of solution. Did the two heads belong to different types, fellah and negro? Is it a case of superfœtation in which two ova have been separately fecundated, the one by a negro, and the other by a white; the ova becoming fused with the exception of the two heads? If this were the case, it is difficult to understand why some portion of the skin of the trunk and extremities should not have been equally black. M. Prus remarks, that there are negro laborers in the port of Alexandria, but he could not ascertain whether the mother had had intercourse with one of that race. A committee has been appointed by the Society, to draw up a report upon this very remarkable case.—*L'Union Medicale.*

On Vomiting During Pregnancy. (*Brit. Rec. of Obs. Med.*)—Dr. Churchill has published the particulars of two cases of obstinate vomiting attending pregnancy, where many migivings and doubts were entertained. The first was a patient under the care of Drs. Maguire and Churchill, who was seized about the eighth week of her third pregnancy, with severe sickness. In order to alleviate it opium, effervescing draughts, prussic acid, creasote, aperients, ether, lime-water, lemon-juice, ice, together with bleeding, leeching, sinapisms, fomentations, &c., were successively resorted to but without relief. The vomiting continued most obstinately until she became emaciated to almost a skeleton. On the 16th of October Dr. C. gives the following report of the case:

Vomiting incessant all day, and distress inexpressible. On my visiting her, I found her far worse than I had ever seen her, and I really cannot convey by words her agony. When not actually vomiting she suffered more torture from nausea; she lay tossing about in the bed or suddenly throwing herself out of bed, and would roll about on the floor. Her sighs and groans were mingled with shrieks and petitions for relief. Her face was haggard, her eyes sunken and surrounded by dark circles; her body was little more than skin and bone; her stomach retained nothing for a moment; the pulse at 130, and very weak. Occasional suffocation distressing. We heard the interior souffle, but could not hear the fœtal heart. Ordered a little brandy and water. Hoffman and valerian and the anodyne enema at bed time. 17th.—Vomiting dreadfully all night and day, nothing whatever remaining on her stomach; great debility and emaciation; perceptibly weaker each day; pulse 130, very weak. Teaspoonful of brandy and water every hour, and chicken-broth. Opium suppository at night. 18th.—Worse than ever; in such agony as I never before beheld; pulse 130; has taken no food, and is utterly exhausted; placental souffle heard, but not fœtal heart. As no medicine afforded any relief, and as each attack had been worse than the preceding, and as her condition appeared to us to be one of imminent danger, it was clear that some change of plan must be made immediately.

We had tried bleeding, leeching, blistering, opium in several forms, antispasmodics, lime-water, acids, calomel, creasote, prussic acid, stimulants of various kinds, without any apparent benefit, for though the sickness subsided twice, it did not appear to be the direct effect of medicines. On the other hand, the want of food and the constant irritation of nausea and vomiting, had utterly exhausted the patient. She had little or no sleep for five nights; had not retained a particle of food; the pulse had long been 130, and now was rapidly becoming weaker. She was utterly helpless; less restless than before from sheer weakness; her countenance was drawn and sunk; in short, we could no longer doubt that another week of such suffering would end fatally for our patient. Under these circumstances, after most anxious reflection and consultation, and with a painful sense of the responsibility, we decided upon bringing on premature labor, unless some decided change had taken place, at our visit next day. 19th.—So far from any improvement, our patient appeared to be rapidly getting worse; I therefore gave her 40 grains of recently powdered ergot of rye, which she retained three quarters of an hour, but which produced no effect. It was repeated an hour after, and again vomited. As it appeared to increase the burning pain at her stomach, without appearing to act upon the uterus, no more was given. In the evening, she was lifted on the sofa, and whilst there, there was a gush of about a pint of fluid (liq. amnii) from the vagina, with some slight pain. 20th.—No rest during the night, and no pains. Desirous to avoid repeating the ergot, I passed a bougie into the uterus this morning, and on October 21st, it was evident that the liquor amnii had escaped, as no fluid followed the introduction of the bougie, nor did uterine contractions come on. We were now greatly distressed: we wished to avoid giving up, and yet, the introduction of the bougie had been ineffectual, and our patient was palpably sinking. During Oct. 21, we endeavored to keep up her strength by brandy and water and chicken-broth, but with little success. 22d.—As we had no other means at command, we determined again to try ergot. Two doses were given, and though they added to the discomfort of the stomach, after the latter we found distinct uterine pains coming on at intervals during the day and night, but the vomiting, fainting and exhaustion, rather increased. The stimulants were continued. 23d.—Uterine pains continued at intervals during the day, though slight; prostration excessive—in fact, her friends thought her dying; pulse 160; nothing remains on the stomach. A stimulating injection was given. 24th.—Remained in the same state during the day, but at night the pains increased in frequency and strength, and at 4 A. M., October 25th, a macerated fœtus, with the secundines, was expelled without hemorrhage. She vomited twice that day, and once the next morning, but never afterwards. She now took nourishment, and in a fortnight was perfectly convalescent.

I have entered into this lengthened detail, that you might see the wretched state to which the patient was reduced, the fair trial which the usual medicines had, their failure, and to acquit us of rashness in having recourse to the only means left to save life. That we waited long enough, there could be no doubt; there was a misgiving in our minds for some days, that we had waited too long; but the result disproved this, and afforded us boundless gratification.

P. S. Since the first part of this paper was published, another case has occurred to me, not less remarkable and instructive, though the result has been less favorable.

On the 12th of December I was requested by Mr. Young, of this city, to visit Mrs. S. with him. She was above forty years of age, had borne six children, and was in good health up to seven weeks ago, when she was attacked with severe dysentery, which after the usual treatment, subsided, or rather was superseded by incessant vomiting. For the last few weeks she had retained nothing on her stomach, and was in consequence reduced to the greatest degree of weakness and exhaustion. The emaciation was excessive, and she was literally skin and bone. She was confined to bed, and suffered great agony from retching both night and day; her pulse was 120, and so weak as to be barely perceptible. I carefully examined every organ of the body, but could find no disease. I thought I could discern a fulness over the pubes, and I asked her if she were pregnant. She did not think so, although her catamenia had been absent four months, and certainly she had corroborative symptoms. Upon anxious consideration of the case, however, I still inclined to the belief that she was in the family way, and as all the usual remedies had been tried by Mr. Young without success, I proposed to pass a bougie into the uterus for the purpose of bringing on abortion, if she were pregnant. This I did on the 15th of December, but no liq. amnii escaped, and my fears as to the correctness of my diagnosis and the result to our patient were great, for it was quite evident that in her present circumstances she could not live a week. I inserted into the os uteri a small roll of lint, and left at three, and on my visit the next day I found a fœtus of three months lying on the bed. Labor came on in the morning, and she was delivered without much suffering, and without hemorrhage. The fœtus was macerated, and had evidently been dead for some time, which accounted for the absence of stethoscopic signs of pregnancy.

From this moment the vomiting ceased, she took proper nourishment, and for two days made a favorable progress; but she was then attacked by obstinate and continued diarrhœa, which resisted every remedy, and under which she sank about six days after delivery. This case is of great interest in these particulars. 1st,—As affording another example of a patient reduced to the verge of death by the vomiting of pregnancy. She was worse when I first saw her than the case I have just related, although the vomiting had not continued so long. 2d,—The diagnosis was unusually difficult.

The patient was near the age at which menstruation ceases: did not believe herself pregnant, had no other symptom but the absence of the catamenia, and the vomiting; and the attack had come on at the termination of dysentery. 3d,—The success of the operation was perfect as regards the vomiting. She took food and drink immediately after delivery, and never vomited again. But we find that we may not defer the operation beyond a certain point without danger. When I saw this patient, she was so much reduced that she could not have lived another week, but this state of exhaustion rendered an attack of diarrhœa fatal, which might have been borne very well had she been stronger. Had I seen her sooner, I have scarcely a doubt that she would have recovered.

MISCELLANEA.

Number of Medical Students in the Medical Schools of France and Spain.—(Med. Gaz.)—It appears from official documents, that the number of medical students in the schools and colleges of France is 1875, of whom there are in the faculty of Paris 800, in that of Montpellier 175, and of Strasburg 77. The remainder are pretty nearly equally distributed among twenty other minor schools in the provinces. In Spain, with a much smaller population than France, the number of medical students is said to be much greater. Thus, in Madrid, there are 1100, and in the united schools of Barcelona, Cadiz, and Santiago, there are no less than 400, making a total of 1500 students.

Urea, a Natural Ingredient of the Blood.—An experiment recently performed by J. C. Strahl, would seem to prove that urea may exist in the blood in its ordinary healthy condition. Having abstracted four ounces of blood from a dog, he treated it with three times its volume of pure alcohol, and having separated by filtration the coagulum which formed, he concentrated the whole extract by evaporation, and then added to it an aqueous solution of oxalic acid. On examining the mixture with a magnifying power of eighty diameters, he detected in it distinct crystals of oxalate of urea.—*Heller's Archiv*, 1848.

Claims of Hunter on the Admiration of Posterity.—Some physiological writers, in considering the claims of Hunter to the admiration of posterity, have not hesitated to affirm that the facts accumulated by his industry will constitute the basis on which his fame will ultimately repose; and that these will remain when his speculations will be forgotten. These strange assertions render it desirable to show that it is precisely these depreciated speculations, or rather, as in justice they ought to be termed, these splendid generalizations, touching the relations and laws of vital forces, which have now, as they will hereafter have, the highest claims to the notice and the admiration of the student in physiology. That some of these views were, from their character, difficult of apprehension, and that others were obscured by an infelicity of language, may be readily granted; but it must not be forgotten, that science sustained the irreparable loss of never having the collected and elaborated conceptions of Hunter's genius on some of the highest subjects that can engage the human mind. —*Mr. Grainger's Hunterian Oration.*

Tape-worm in Fish.—M. Ancelon mentions the singular fact, that in lately examining a small fish, known under the name of *rousse*, he found a tænia about eleven inches in length, precisely resembling the entozoon found in the human intestines. The only difference was, that the head instead of terminating in a long and very narrow neck, ended in a point which the animal could elongate or contract at will. He was unable to discover any trace of a mouth.

Detection of Human Skin by the Microscope.—At a recent meeting of the Microscopical Society of London, Mr. John Quekett, the microscopic demonstrator to the Royal College of Surgeons, read a very interesting paper on the importance of the microscope in the determination of minute structures of a doubtful nature. The author stated that his object in bringing this communication before the Society, was to point out how minute portions of skin, which had been exposed to the air for centuries, could be recognised as human. There existed in this country certain traditions, that persons who had committed sacrilege were flayed, and their skins nailed to the doors of the churches they had robbed, as a terror to the sacrilegists; and three portions of such skin had been forwarded to the author, for examination, by Albert Ray, Esq., the Secretary of the Archæological Society. The first was taken from one of the doors of Worcester Cathedral, where now only portions remain underneath the ornamental clamps and hinges. The second specimen was taken from the church-door of Hadstock, in Essex, where it had been protected, for many centuries, by an iron-grating: this portion of skin was said to have been that of a Danish pirate, and is supposed to be nearly 900 years old. The third specimen was taken from the church-door of Copford, also in Essex. On all the specimens Mr. Quekett succeeded in finding two or three hairs, which the microscope clearly proved to be human. Thus this valuable instrument is able to confirm a tradition, and prove the former prevalence of a practice which had been doubted by many archæologists.—*Lon. Med. Gaz.*

M. Raspail and Medical Democracy.—M. Raspail, whose name has been for some years known to chemists, is about to be tried on a charge of conspiracy against the National Assembly. He took an active part in the insurrecof Barbès on the 15th May, and caused himself to be nominated President of the red Republic (the Republic of blood!) As a specimen of the sort of liberty to be accorded to the medical profession by the triumph of ultra-democratical principles, we here quote the sketch of a decree found among the papers of this liberal *savant*:—

Considering that the first right of the people is that of entrusting the care of its health to whomsoever it pleases, it is decreed.—

1. That the laws, decrees, and regulations, concerning the teaching and practise of medicine are entirely abolished.

2. That the titles and diplomas conferred by these laws, decrees, and regulations, are declared null and void.

3. Every citizen has a right to attend patients, and to obtain for such attendance a proper remuneration.

M. Raspail was himself convicted and punished for the illegal practice of medicine shortly before the revolution; hence it is not surprising that a scientific citizen of his stamp, should wish to overthrow laws which had interfered with what he considers to be a legitimate mode of gaining a livelihood—*i. e.*, by the open practice of quackery among the poor and ignorant!—*Lon. Med. Gaz.*

University College, London. The London Medical Gazette for August 18th contains the following remarks upon the recent difficulties which this College has experienced in the appointment of Professors to the vacant chairs of Surgery, Clinical Surgery, and to the offices of Surgeon and Assistant Surgeons.

It is with great satisfaction we can announce that the surgical appointments at University College have been at length filled up in a manner which reflects credit upon the Council. The dissensions which have so recently occurred, were calculated to damage the character of the College as a place of instruction; but happily these have been healed by a judicious selection of new men; and there is now every prospect that the October session will be opened under the most favorable auspices. As we announced in our number of the 26th ult., Mr. J. M. Arnott, whose high reputation as a practical surgeon is so well known to the profession, has accepted the office of Surgeon to the North London Hospital, and Professor of Surgery in University College. In making this appointment, it cannot be imputed to the Council that they have adopted the practice of "sending for strangers," or that they have selected an untried man, or one whose reputation had yet to be made. Mr. Arnott, by his long connection with the Middlesex Hospital, has become completely identified with the profession of the metropolis; and by his high standing as a surgeon, he cannot fail to perform the duties of his office with credit to himself and benefit to the pupils of the College. Upon the propriety of this appointment, and the judgment of the Council in making it, there cannot, we think, be one dissentient voice. Mr. Richard Quain takes the Professorship of Clinical Surgery; and Mr. Morton holds the office of Surgeon to the Hospital. Mr. J. E. Erichson and Mr. Marshall have been appointed Assistant Surgeons. It was not probable that the last-mentioned appointments could be made without exciting some feeling of discontent. Every disappointed candidate will of course condemn the Council for excluding himself; but there is good reason to believe that the appointments have been made with a proper regard to the claims of pupils, and to the interests of the College. Of Mr. Marshall's qualifications we are unable to speak; but of those of Mr. J. E. Erichsen there can be only one opinion. His name has been before the profession for some years. His essay on asphyxia, on burns and scalds, and on diseases of the skin, of which the two latter were published a few years since in the pages of this journal, are sufficient to show that he is not only an original thinker, but a man possessed of a good practical knowledge of his profession.

From this statement, our readers will, we think, agree with us that the Council of University College have done all that is in their power to restore harmony to the school. We feel ourselves in a position to express an unbiassed opinion on this subject, as during the late discussion we avoided making this journal an organ of party feeling, and declined allowing any personal attacks or rejoinders, anonymous or otherwise, to appear in our pages.

OBITUARY.

Death of Baron Berzelius.—This distinguished chemist, the father of analytical chemistry, expired on the 7th of August, at Stockholm. Baron Berzelius was born on the 20th of August, 1779, in Ostergothland, in Sweden, of a respectable family. At the age of 17 he entered the University of Upsala, where he made a rapid progress in his studies, particularly his favorite science —chemistry; after passing the necessary examinations, he received his diploma of Doctor in Medicine in 1804, and was appointed Medicinæ et Pharmaciæ Adjunctus at the Collegium Medicum at Stockholm, and gave instruction in chemistry to young students, and, on account of his small income, was obliged to practise occasionally as a physician. In 1807 he was appointed Medicinæ et Pharmaciæ Professor, and in the same year he instituted, in conjunction with seven other eminent men, the Swedish Medical Society at Stockholm, now a most flourishing institution, and constituting the very heart of the medical profession in Sweden.

In 1808 he was made a member of the Royal Academy of Science, in 1810 officiated as president, and in 1818, as perpetual secretary. On the occasion of holding this appointment for a quarter of a century, a dinner was given in the Academy by the members to this distinguished *savant*, which was presided over by his present majesty, then the crown prince, who, on proposing the health of Berzelius, expressed his grateful acknowledgment of his own obligations to Berzelius for the valuable private instruction he had received from him in his younger days. In the same year he was appointed a member of the Royal Sanitary Board, of which, at the time of his death, he was the senior member. As a proof of the magnitude of his laborious pursuits, it may be sufficient to mention that he first developed the electro-chemical system, and that he has also examined and minutely described the atomic theory of the elementary bodies. He discovered and examined several great classes of chemical combinations, as, for instance, the different degrees in which sulphur combines with fluoric acid, with platinum, columbium, vanadium, tellurium and phosphorus, the sulphates, &c. In organic chemistry he has no less distinguished himself by his experiments; and, properly speaking, he has laid the foundation of vegetable and animal chemistry; more particularly the latter. As regards chemical analysis, the highest merits are due to him, for having arranged a new and generally-adopted chemical nomenclature. His works, which have been for the most part translated into the English, French, German, Italian, Spanish and Polish languages, are so numerous and voluminous, that, considering the accuracy with which every thing is described, it appears to be almost a wonder how one man, whose time, besides, is occupied by a great amount of official duties, has been able to accomplish such a mass of scientific publications.

Berzelius had received from his Majesty King Charles John many marks of high distinction: he was created a nobleman in 1818, a Baron in 1835, Knight Commander of the Royal Order of Wasa in 1821, and Grand Cross of the same order in 1829; he was a Knight of the Royal Swedish order of the Polar Star, and of several foreign orders received from the Emperor of Russia and the Kings of Prussia, Denmark, Belgium, France and Sardinia; an honorary member of upwards of one hundred literary and scientific societies. In consideration of the great services which Berzelius had bestowed on his native country, the members of the Diet at Stockholm, in 1840, voted to him the annual sum of 2000 dollars banco as a pension for his lifetime, independent of his former emoluments.

The Edinburgh Journal of Science and the Philosophical Magazine, to which we are indebted for these particulars, state, as showing how high the illustrious deceased ranked in Germany, that in a late history of the Devil, of which so many are published in that country, one of the main inducements his Satanic majesty is represented as holding out to a convert, still half doubtful of selling himself, is, that he will make him *a Berzelius.—London Lancet.*

INDEX TO VOL. I.

[NEW SERIES.]

A.

Abortion, Case of, 66
Abortion and Sterility, Whitehead on, 45
Aconite, Poisoning by, 366
Amputation, Statistics of, 265
Amputation, Secondary Cause of Death in, 280
Amputation in Traumatic Tetanus, 410
Amputation of the Foot, Guide to, 138
Amputation through Large Joints, 113
Anatomical Preparations, Fluid for Preserving the Color of, 144
Anatomical Peculiarity, Case of, 392
Aneurism, Cases of, treated by Compression, 18–110
Aneurism, False, Case of, 112
Aneurism of the Aorta, 216
Anthropo-toxicologia, Cases of, 259
Aorta, Aneurism of, 216
Aortic Valve, Diseased Conditions of, 132
Arteries, Elastic and Contractile Tissue of, 397
Artificial Palate, Gutta Percha for, 144
Ascites, Case of, Terminating in Suppuration, 106
Azoturia, Case of, with Remarks on, 258

B.

Batchelder, J. P., on Inflammation, 157–322
Beck, L. C., Botany of the U. S., 88
Bell & Stokes' Practice, Review of, 198
Berzelius, Baron, Death of, 425
Blakiston, P., on Diseases of Chest, Review of, 40
Blood, Pathology of, in Inebriates, 256
Blood, Composition of, Splenic and Portal, 396
Blood-vessels, Diseases of, 213
Blood-vessels, Condition of, in Inflamed Parts, 276
Borate of Soda, Effects of, 387
Brain, Wounds of, 353
Brain, Hernia of, 355
Bushman, Report on, 151

C.

Capillaries, influence of on the Circulation, 275
Carnochan, J. M., on Pathology of Congenital Dislocation of the Femur, 9
Cauliflower Excrescence, Case of, 60
Cerebro-Spinal Fluid, Experiments on, 254
Cervix Uteri, Inflammation of, 65
Cervix Uteri, Induration of, 65
Cervix Uteri, Ulceration of, 66
Cervix Uteri, Disease of, 381
Chesebrough, N. H., on Infantile Syphilis, 184
Chloroform in Midwifery, 77
Chloroform in Surgery, 375
Chloroform, Internal use of, 387
College of Pharmacy, Ethics of, 392
Cholera, Progress of, 287
Cholera Infantum, 94, 203
Cholera Infantum, Treatment of, 199
Chordæ Tendinæ, Rupture of, 129
Chorea, Statistics of, 408
Christison, R., Dispensatory, Notice of, 359
Cod-Liver Oil, 133
Cold Plague, 262
Congestion Cerebral, its Relations with Softening of the Brain, 130
Copland, J., Dictionary of Medicine, Notice of, 87, 365
Corporæ Menstrualia, 253
Corpus Luteum, 71

Corson, J. W., Loiterings in Europe, &c., Notice of, 89
Croup, Remarks on, 207, 232
Croup, Nitrate of Silver in, 91
Costill, C. H., on Poisons, Notice of, 362
Cyanosis, 128

D.

Davis, N. S., on Heterologous Tumors 30–179
Democracy, Medical, and M. Raspail 424
Diabetes Mellitus 373
Diet of Children, remarks on 234
Distant Vision, its adaptation to the eye 275–300
Dropsy, pathology of 223
Dropsy, varieties of 224
Dropsy, symptoms of 224
Dropsy, treatment of 225
Druitt, R., Principles of Surgery, notice of 363
Dry Gangrene in a child 281
Dunglison's, R., Dictionary, Notice of 361
Dysentery 299
Dysentery, new remedy in 370
Dysmenorrhœa, a new remedy in 269

E.

Eclectic Practititioners 143
Editors of Medical Journals, reward of 120
Elephantiasis Græca 300
Ellis, S. C., case of labor through the perineum 339
Endocarditis 132
Erysipelas, Kreasote in 338
Erysipelas, Epidemic, Pathology of 28
Etherization, Local and General, in Traumatic Tetanus 410
Eve, P. F., Case of False Aneurism 112
Ewing, A., Case of Strangulated Hernia 36
Expectoration, Diagnostic value of 401
Eye, Diseases of 227–300

F.

Femur, Pathology of dislocations of 9–268–404
Femur, dislocation in an infant 281
Femur, fracture of 282
Fever, Typhoid 298
Fever, Yellow 299
Fever, Yellow, cause of 106
Fœtus, death of and its influences 141
Foramen Ovale open, its connection with Cyanosis 128
Fractures Ununited, treatment of 134
Fractures of Thigh-bone in Infants, Treatment of 409
Fungous Hæmatodes oculi 257

G.

Gairdner, Dr., on Bright's disease of the Kidney 127
Gardiner's, D. P., Medical Chemistry, Notice of 245
Gestation, Prolonged, Case of 380
Gooch, R., on Disease of Females, Notice of 245
Glossitis, Acute, in an Infant 373
Gray, H. M., Case of poisoning by Aconite 336
Gunshot Wounds 416

H.

Hasbrouck, M. C., on Pnenumonia Typhoides, 24
Head, Injuries of, 347–348–349–350–351
Heart, Statistics of Valvular Disease of, 277
Heart, Blood-vessels of the Nerves of, 395
Hemorrhage, Use of Turpentine in, 400
Hernia, Strangulated, Petit's mode of Operation for, 405
Hernia, Case of, 36
Hernia, Congenital, Case of, 136
Hood, J. W., Principles of Medicine, Notice of, 366
Hosack, A. E., Case of Aneurism Treated by Compression, 18
Hosack, A. E., Description of Instrument for the Treatment of Aneurism, 20
Human Skin, Detection of, by the Microscope, 424
Hunter's Claims to the Admiration of Posterity, 423

I.

Iliac Artery, case of, tying of, 394
Infantile Syphilis, 184
Infantile Syphilis, Case of, 374
Infants, Jaundice of, 130
Inflammation, Anatomical Characteristics of, 307
Inflammation, Physiological Characteristics of, 310
Inflammation, Reflections on, 309–312
Inflammation, Batchelder on, 157–322
Inflammation, Methodus Medendi of, 324
Intermittent Diseases, Pathology of, 400
Intestines, Sloughing of, 252
Iodide of Potassa, Adulteration of, 118
Ireland, Epidemic Fever of, 126
Irish Medical Men, Mortality of, 143
Iritis, 228

Iritis, Symptoms and Progress of, 228
Iritis, Causes and Treatment of, 229

J.

Jaundice of Infants, 130
Jaundice, Pathology of, 261

K.

Keloide, Observations on, 376
Kidney, Bright's Disease of, Gairdner on, 127
Kidney, Bright's Disease of, Bennett on, 128
Kidney, Bright's Disease of, Simpson on, 128
Knight, J., on Aneurism, Treated by Compression, 110
Kreasote in Erysipelas, 388

L.

Labor, Interesting Case of, 371
Labor with Quadruplets, Case of, 269
Labor, Singular Case of, 339
Laryngitis, Treatment of, 211
Lead Pipe, Injurious effects of, on Water, 241–243–244
Lee, C. A., Valedictory of, 90
Leucorrhœa, Treatment of, 64–205
London University College, 424
Liston, Statue of, 288
Lymphatic Gland, Scirrhus of, 281

M.

McClellan, G., Case of Tumor of the Neck 109
Materia Medica, Mexican 304
Mayne, Dr., on Cyanosis 128
Mayne, J., Dispensatory 88
Medical and Surgical Association, Provincial, Notice of Proceedings of 368
Medical Services, legal responsibility of 119
Medical Association, American, Proceedings of 120
Medicines, Adulteration of 92–115–382
Medicated Pessaries 285
Medical Society of Connecticut 272
Medical Society of New-Jersey 272
Medical Journal, Ohio 273
Medical Schools of Portugal 288
Meigs, J. F., Treatise on Children 231
Menstrual Blood, Properties of 46
Menstrual Blood, Source of 49
Menstrual Blood, Crisis 57
Menstruation Difficult 49–56
Menstruation Retarded, Case of 52
Menstruation Suppressed, Case of 53
Mercurial Salivation, Treatment of 390
Mexican Materia Medica 304
Mexicans, Diseases of 297
Mexico, Medical Topography of 295
Mexico, Medical Police of 302
Mexico, Medical Profession of 305
Mexico, Report of Deaths in 306
Midwifery, Tucker's Review of 70
Midwifery, Chloroform in, by Murphy 140
Midwifery, Chloroform in, by Stimson 174
Miliary Fever, Epidemic of 21
Miliary Fever, Epidemic among the Sioux Indians 23
Mississippi Valley, Monuments of 94–367
Mitchel, M., on the Cerebro-Spinal Fluid 254
Mitral Valve, diseased condition of 132
Monster, Dicephalous 420

N.

Neill and Smith's Compendium, Notice of 364
Neuromatous Tumors, Treatment of 135
Newton on Medical Topography of Mexico 295
New-York Hospital 119
Nocturnal Micturition 278

O.

Obituary, 273
Ochlesis, 274
Œdema of the Lower Extremities, Cause of, 133
Œdema of the Glottis, 137
Oil, Cod-liver, its use in Phthisis, 133
Opium, Adulteration of, 116
Ophthalmia, 260
Ophthalmia, Gonorrhœal, 136
Orange Peel, Poison by, 113
Ovarium, Cancer of, 60
Ovarian Disease, 378
Ovarian Tumor, Removal of, during Pregnancy, 420

P.

Palate, Fissure of, 267
Pancreas, Scirrhus of, 399
Pancreatic Fluid, Use of, 274
Paris Hospitals, Appearance of, After the Late Insurrection, 416
Penis, Cancer of, 113
Penis, Amputation of, 113
Pericarditis, 132
Peritonitis, intra-uterine, 142
Phlebitis, 219
Phlebitis, Varieties of, 221
Pigné, J. B., on Inflammation, 307
Placentitis Occuring Twice in the same Woman, 419

COLUMBIA UNIVERSITY LIBRARIES

This book is due on the date indicated below, or at the expiration of a definite period after the date of borrowing, as provided by the rules of the Library or by special arrangement with the Librarian in charge.

DATE BORROWED	DATE DUE	DATE BORROWED	DATE DUE

C28(1141)M100

COLUMBIA UNIVERSITY LIBRARIES
0062040480